



# **Ahmadu Bello University, Zaria**

## **Department of Computer Science**

*Reviewed Laboratory Manual for*

**COSC 101:**

*Introduction to Computing*

**January, 2020**

# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 01: Computer Systems Components & their Functions

##### Introduction to computer (Week 1)

**Topics Covered:** Identification of basic computer components & their functions and Computer Devices.

**Instruction:**

- You should write your answers to the questions below in your notebook.
- You must give your notebook to the lab instructor for marking.
- Lab exercise2 will require the image of the motherboard available on the link <https://dcs.abu.edu.ng/courses/cosc101/> for reference.
- Lab exercise3 will require the use of a standard computer keyboard for illustration.

**Lab Objectives:**

The students should understand:

- The different types of computer casing.
- How to identify the Make or manufacturer of a system
- The Internal & External components of a computer systems
- The different ports available to a particular system and their functions

**Lab Exercise 1:**

**Requirement:** these lab exercises require a complete system with its internal components.

**1a). Identify the following:**

- i. The **TYPE/MAKE AND MODEL** of the computer you're using. E.g. (HP – Pavilion, DV4, laptop)
- ii. **LPT** Ports, how many ports are there? Where are they located in your computer?
- iii. **COM** ports. How many ports did you see?
- iv. **PS2** ports. What color is for Mouse & for Keyboard?
- v. Where is the **POWER LED** located?
- vi. The **CD/DVD ROM**. Is the ROM in your computer CD or DVD Writable?

### 1b). Functions and differences between COM and PS2 ports

Port	Function	Unique characteristics (if any)

### Lab Exercise 2: (Use an image not real Motherboard)

#### Instruction:

- You should write your answers to the questions below in your notebook.
- You must give your notebook to the lab instructor for marking.

#### Lab Objectives:

The students should understand:

- The type of Motherboard in their system casing. (i.e. AT or ATx technology)
- Various components of a board.
- The functions of some of these components

#### 1. Observe the motherboard very well. Draw The board and label the following:

- i. **PCI Slots**. How many are they and what is/are their colors?
- ii. **BIOS**
- iii. **Processor** and Processor Heat Sync.
- iv. **RAM Slots**
- v. Primary & Secondary **IDE Slots**
- vi. What type of **GRAPHIC ADAPTER** is in your system? (is it VGA or SVGA)

#### Check sheet for Motherboard components

Component	Make (if any)	Pins(if any)
Bios		
Processor		
Motherboard		
PCI Slots		
Phone Jack		
RAM		

### Lab Exercise 3: Understanding the Functions of Computer Keyboard

#### Instruction:

- You should write your answers to the questions below in your notebook.
- You must give your notebook to the lab instructor for marking.

**Lab Objectives:**

The students should understand:

1. The type functions of the keyboard buttons
2. How to position fingers ergonomically.
3. How to combine some buttons as Shortcuts
  
4. Observe the Keyboard, locate and know the functions of these buttons:
  - i. The Function buttons
  - ii. Computer Special Keys (Enter key, tab, Shift, backspace, ctrl, alt and CapsLock
  - iii. Prt Sc (print screen), Space bar
  - iv. What is the function of F1, F8, F10 and F12.
  - v. Num Lock, Windows Logo button, Esc button.



# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 02: Operating Systems 1

Lab Exercise 1:

Requirement: the lab exercises requires **Windows 8**

→ **Change the size of Icons on the desktop**

a. Right click on the free space of your **DESKTOP**

b. Point to **VIEW** option and choose either Small, Medium or Large icon size. Toggle between them and see how they differ.

→ **Sort Icons**

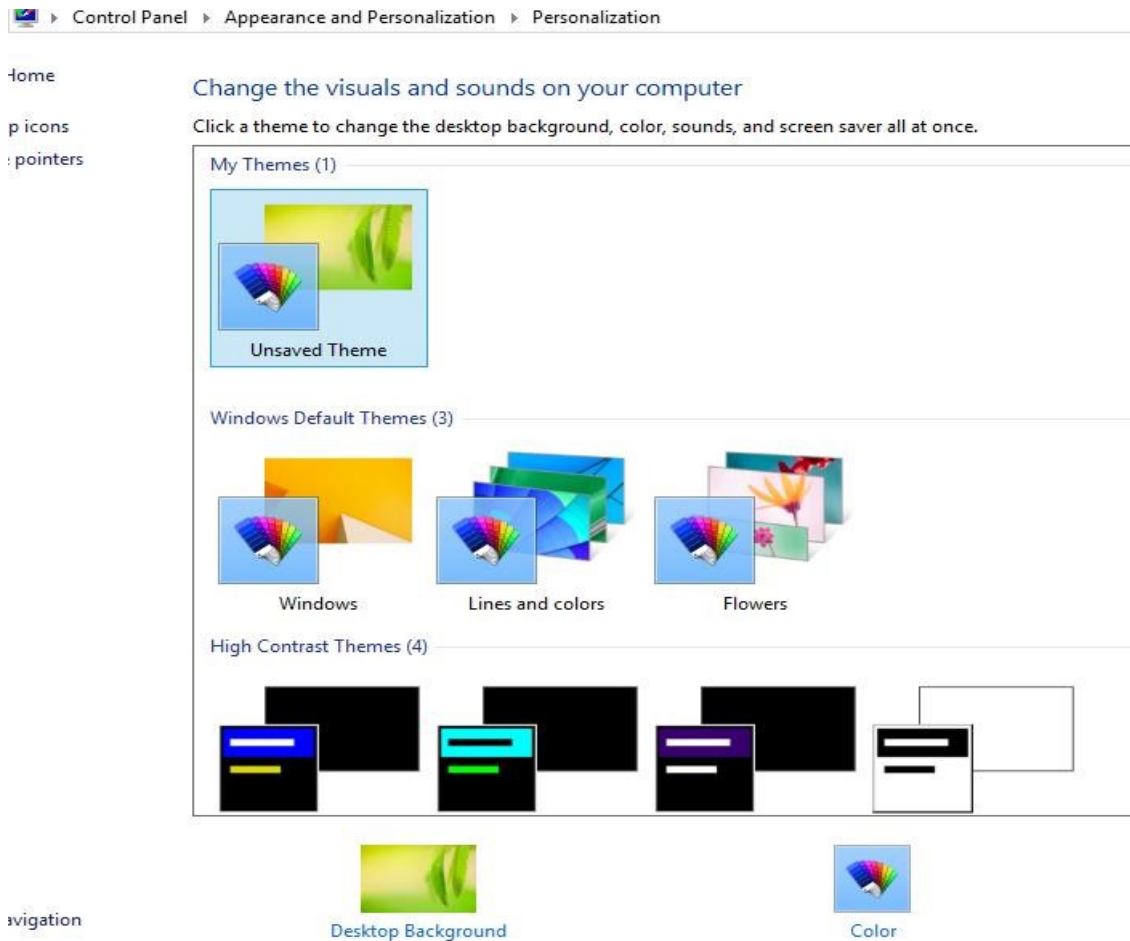
a. Right Click on the free space of your **DESKTOP**

b. Point to **SORT BY** and Click **NAME** option. Then

c. Repeat item b., but this time click on **ITEM TYPE** option.

→ **Add / change wall papers**

a. **Right-click your desktop and choose Personalize. The following window appear:**



b.

- c. Select **Desktop Background** from the windows' bottom left.
- d. Click a new picture for the background. You can click the **drop-down** list to see all the available photos and colors that Windows offers







### Choose your desktop background

Click a picture to make it your desktop background, or select more than one picture to create a slide show.








Picture location: Windows Desktop Backgrounds Browse... Select all Clear all

---


Flowers (6)

      ☒


Lines and colors (7)

Windows (1)



---

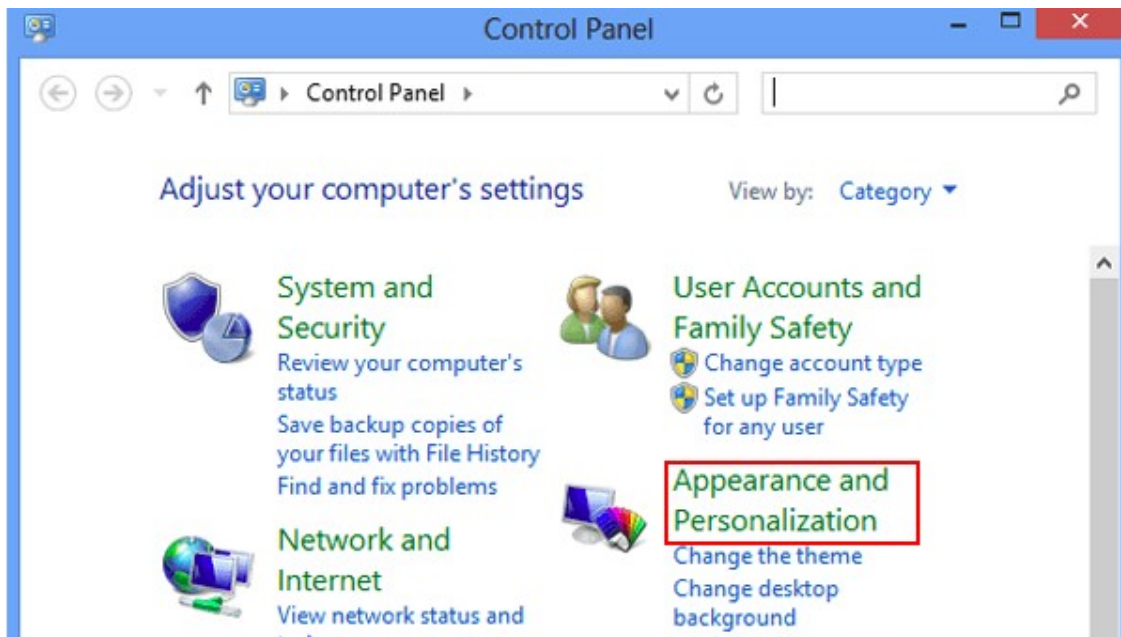
Picture position:  Center Change picture every: 30 minutes ☐ Shuffle

- e. Click on **fill, fit, stretch, tile, or center** to position the picture in different format.
- f. Click the **Save Changes** button to save your new background.

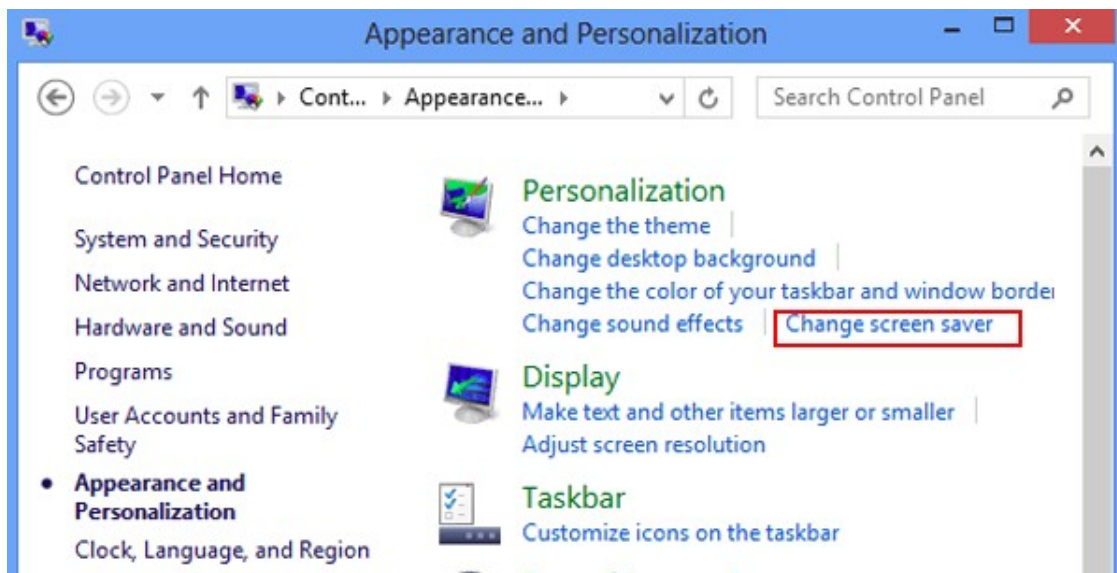
### → Change screen saver

**Method 1: Set/change screen saver in Appearance and Personalization settings.**

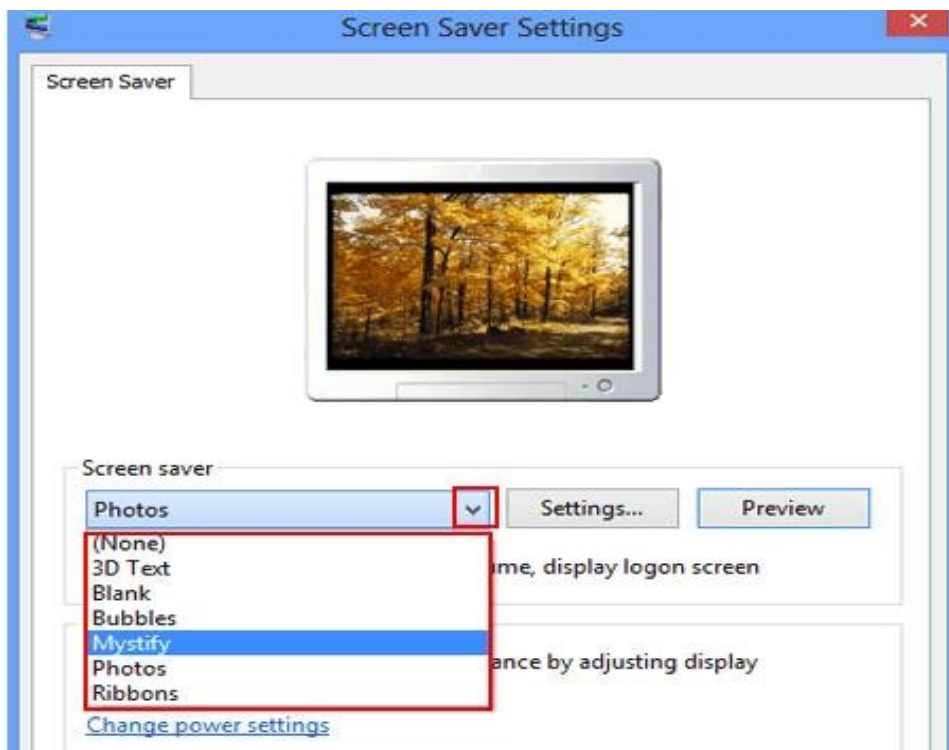
- a. Right click on **WINDOWS LOGO KEY** and select **CONTROL PANEL**
- b. Choose **APPEARANCE AND PERSONALIZATION** in Control Panel.



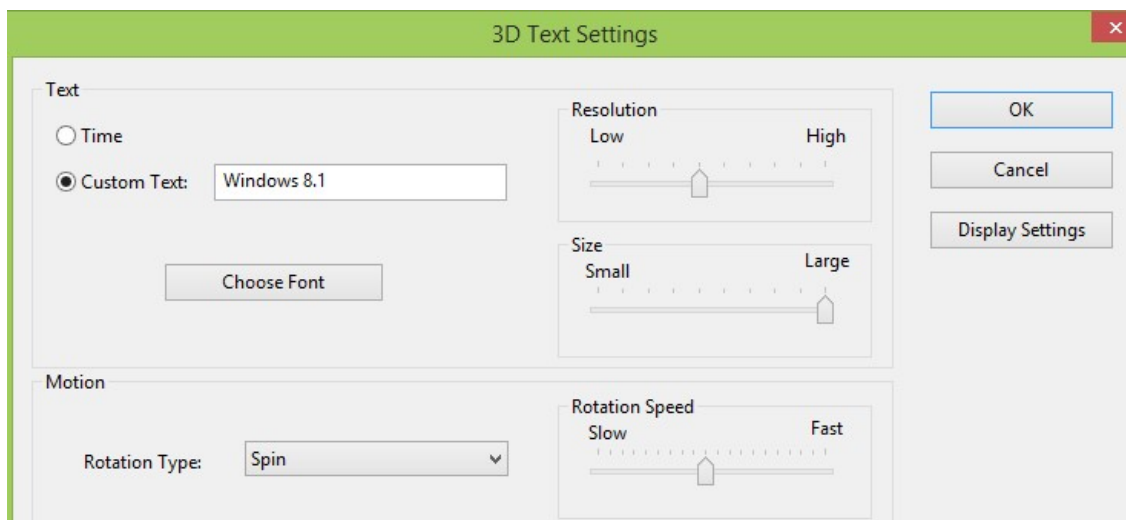
- c. In Appearance and Personalization window, click **Change screen saver** under Personalization.



- d. On the Screen Saver Settings window click the **down arrow** under Screen saver and choose option **3D text**.



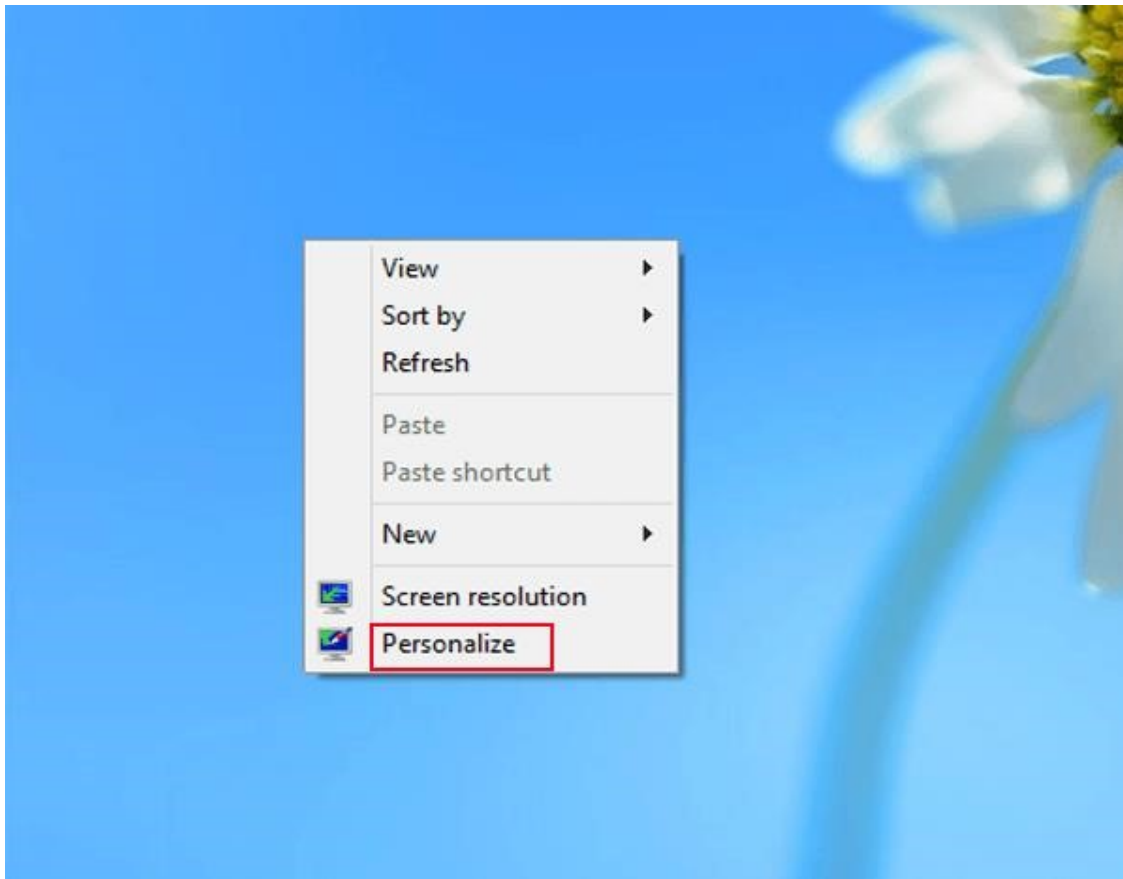
- e. Click on the **SETTINGS** button



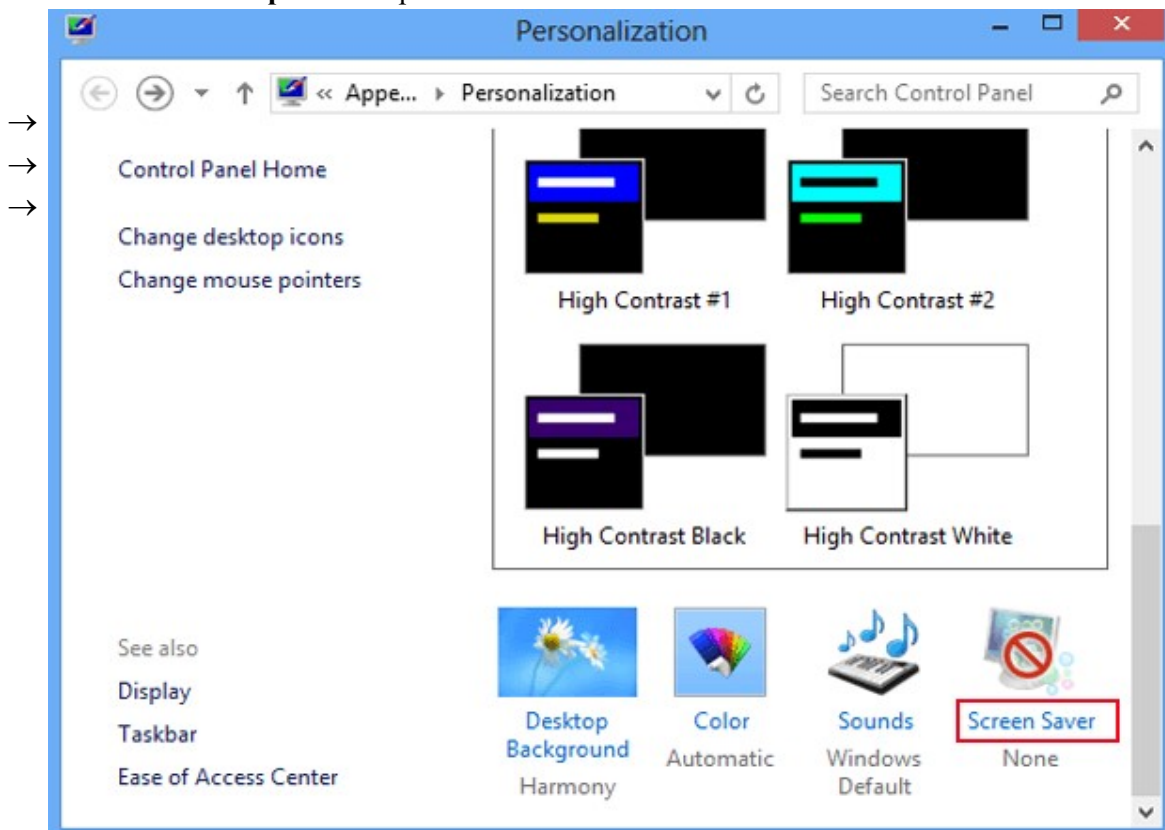
- f. Under **CUSTOM TEXT** option, delete whatever is in there and type “**WELCOME TO AHMADU BELLO UNIVERSITY**”.
- g. Click on **OK**

#### Method 2: Set/change screen saver in Personalization settings.

- a. Right click any blank area on the desktop and select **Personalize** to open it.



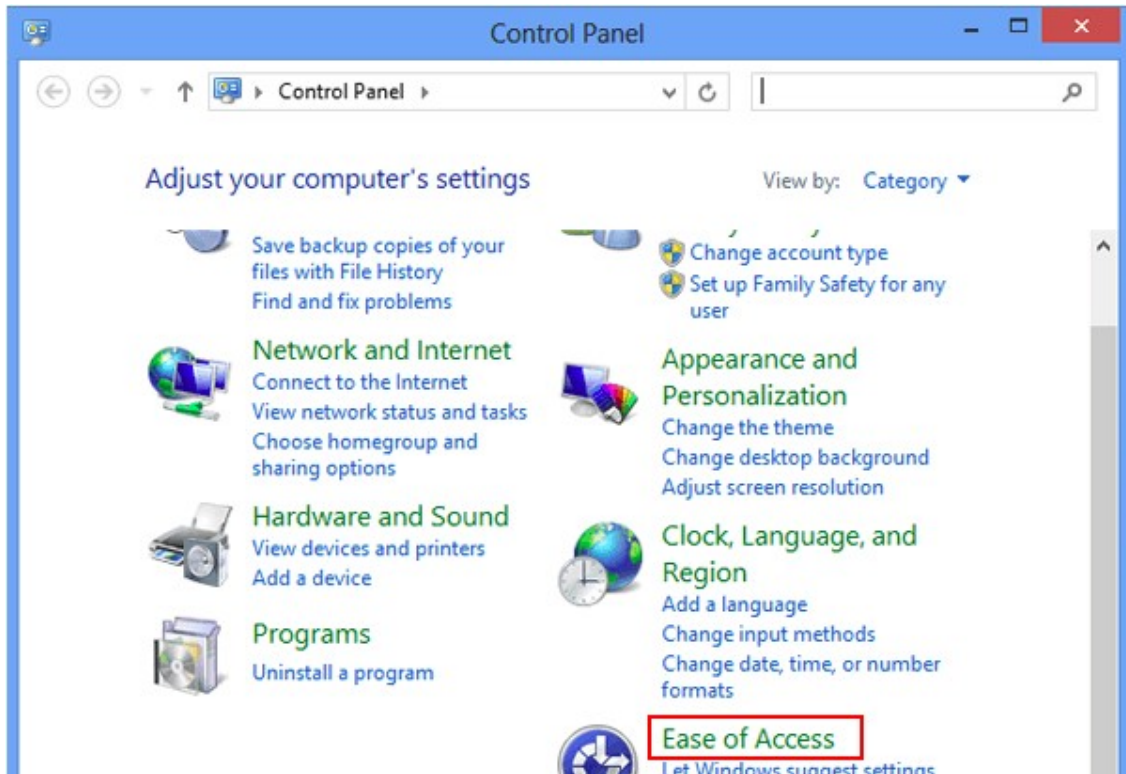
- b. In the Personalization window, find and click **Screen Saver** on the bottom right corner.
- c. Continue from **step d.** in the previous method.



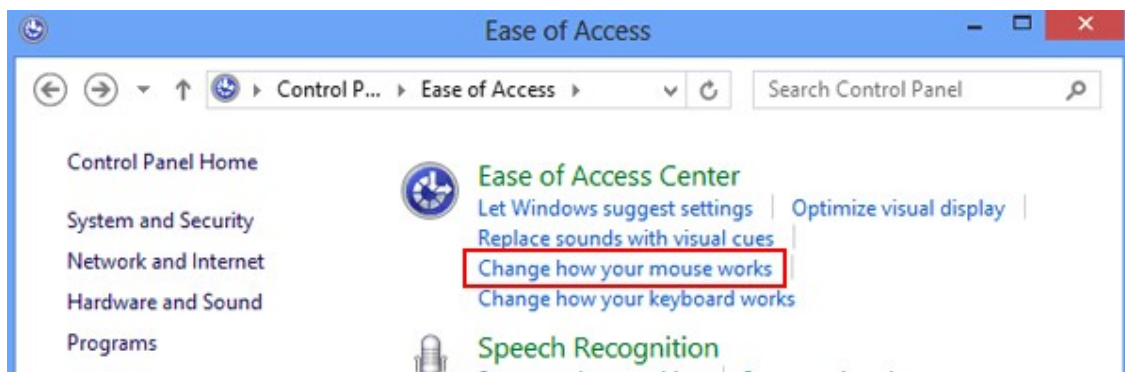
→ **Change Mouse Pointer size and color via Control Panel**

a. Right click on Windows button and Select **Control Panel**

b. In the Control Panel Window select **Ease of Access**

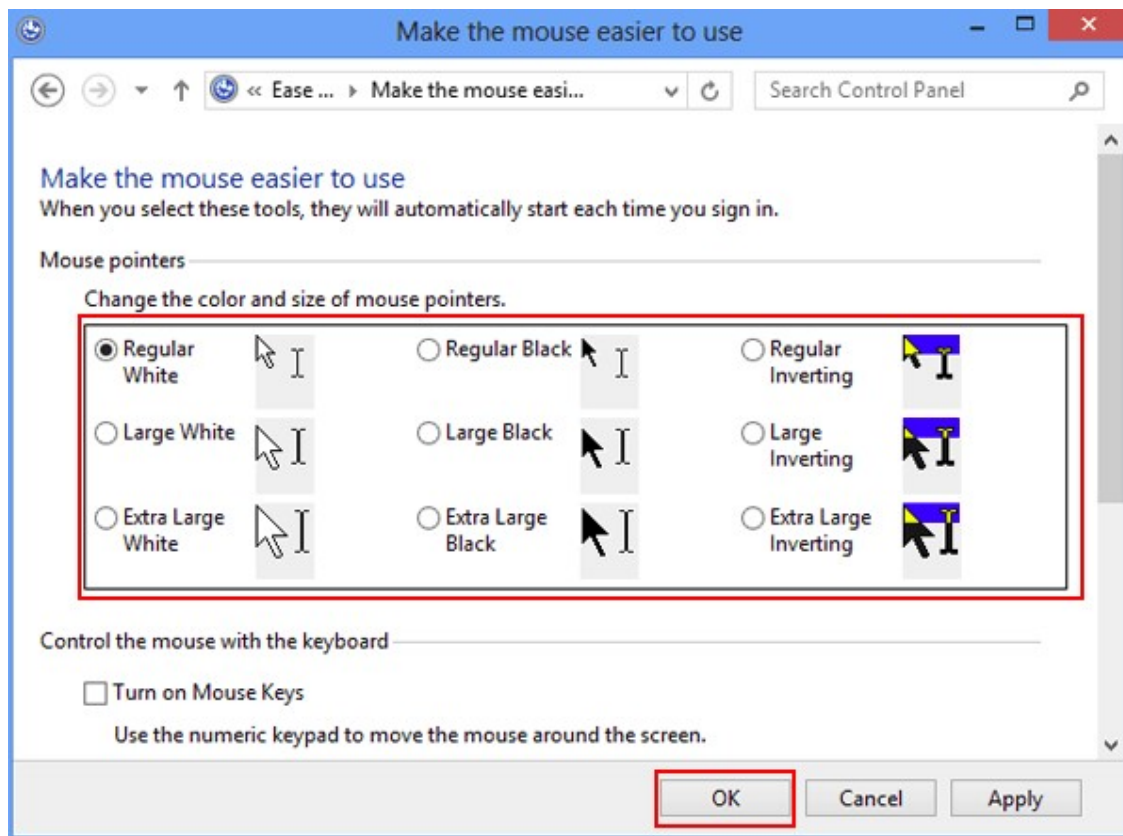


c. In the Ease of Access window, choose **Change how your mouse works**



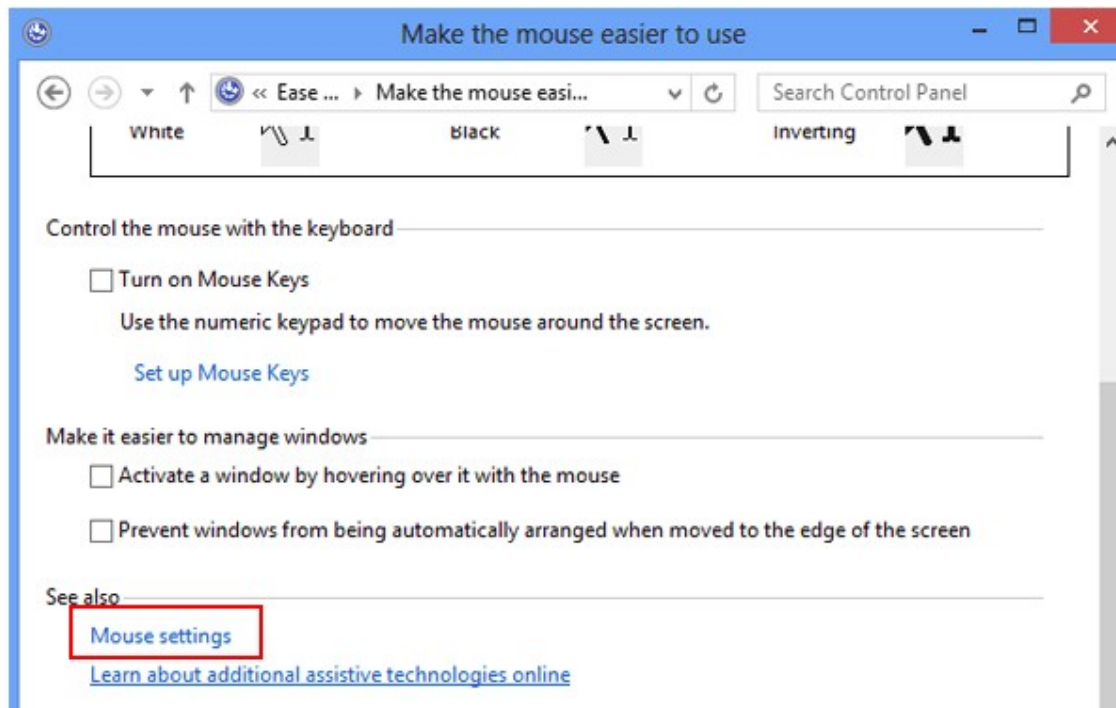
d. In the next window, choose the mouse pointer you like from the list of mouse pointers, and then click **OK** to exit the interface,





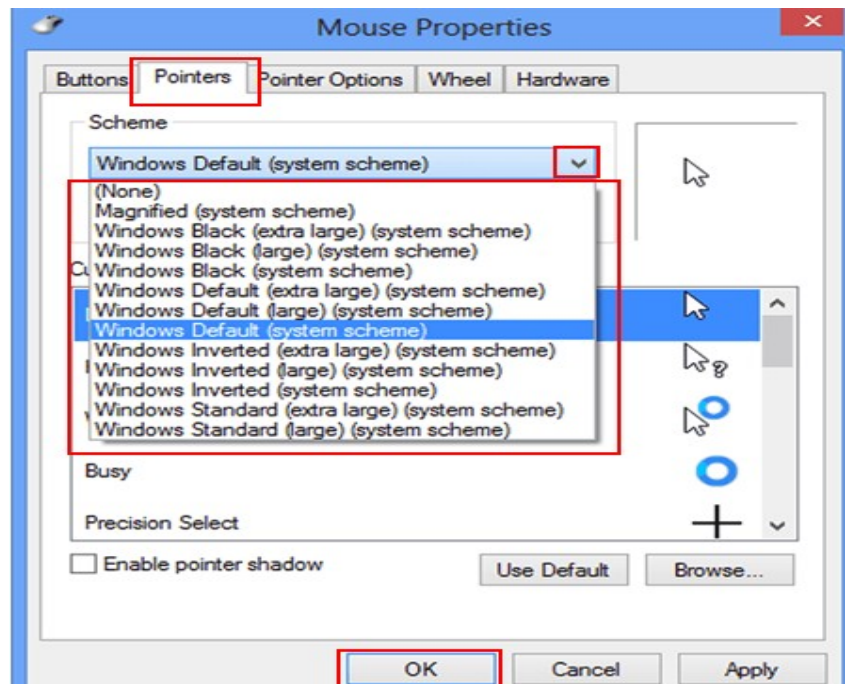
→ **Change Mouse Pointer size and color via Mouse Properties.**

a. Follow steps (a to d) in the previous method



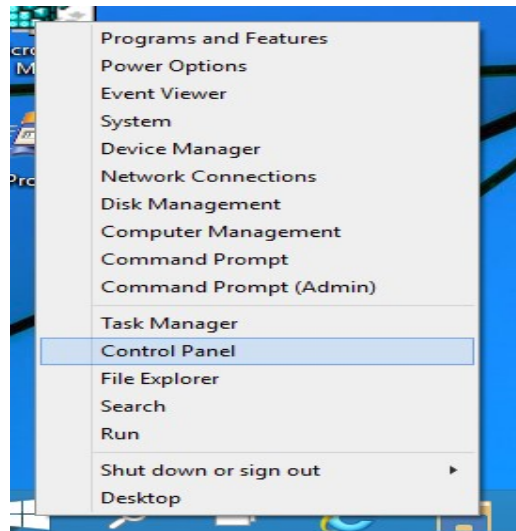


- b. In the window of **Make the mouse easier to use**, move the scroll bar down and select **Mouse Settings**
- c. In the Mouse Properties dialog box, choose **Pointers** on the top, Click on the **down arrow** under Scheme, select a pointer scheme in the pull-down list and click **OK** to affirm the changes.



→ **Change Power Button Action with Control Panel**

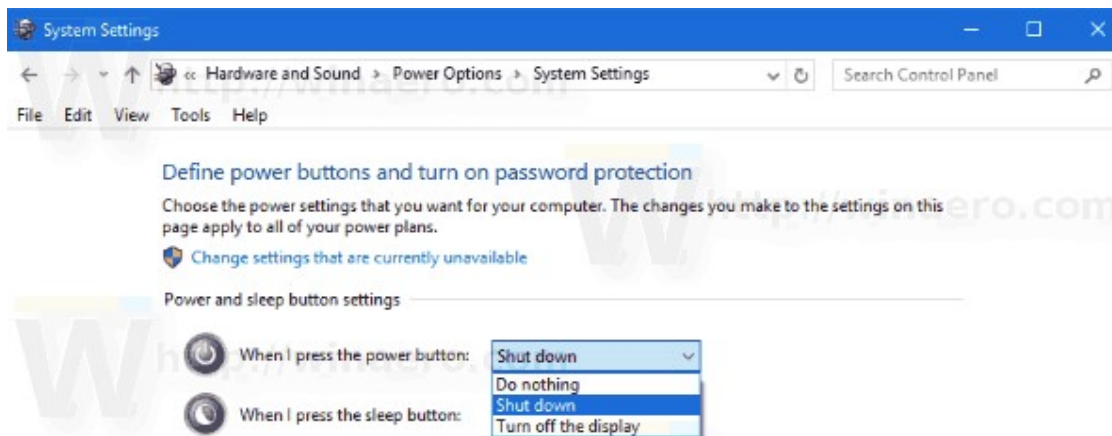
- a. Click Window + X keys on your keyboard
- b. Select control panel



- c. Click on hardware and sound
- d. Click on power options
- e. On the left, click on what the power buttons do



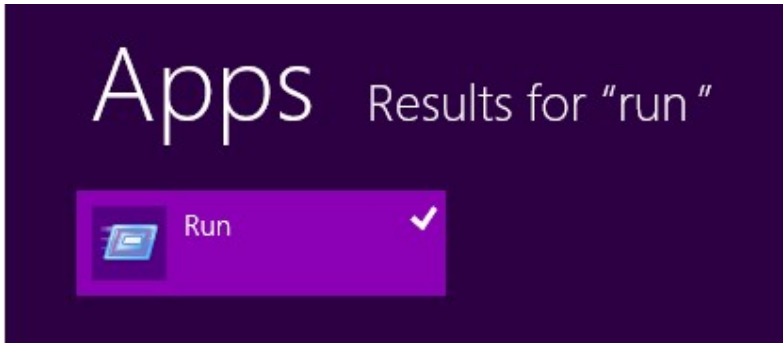
- f. In the drop down list *When I press the power button*, select the desired action.



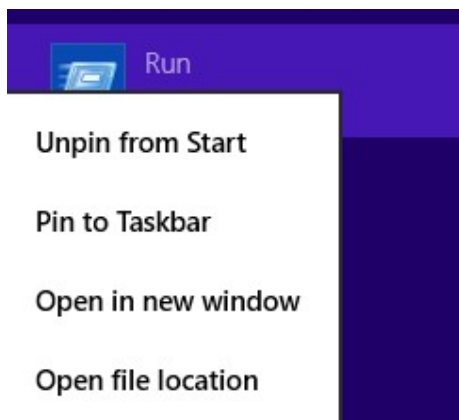
→ Adding Run Command to Start Window/Menu using Pin to Start.

- a. Click on Start Menu or press Window Key on your keyboard

- b. Type run



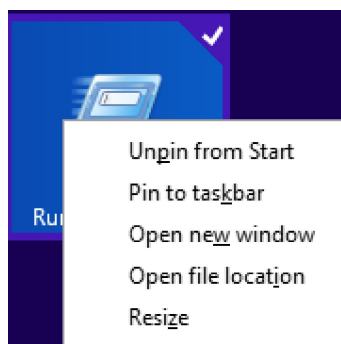
- c. The **Run command** appears as the list of items that begins with “run”  
d. Right click on **Run** and select **pin to start**



The Run command will be added to your start menu or window

→ Remove **Run Command from Start Window/Menu**

- a. Click on Start Menu or press Window Key on your keyboard  
b. If Run command is not visible, use the horizontal scroll bar to scroll to the right to look for it  
c. Right click on **Run**



- e. Select **Unpin from start**

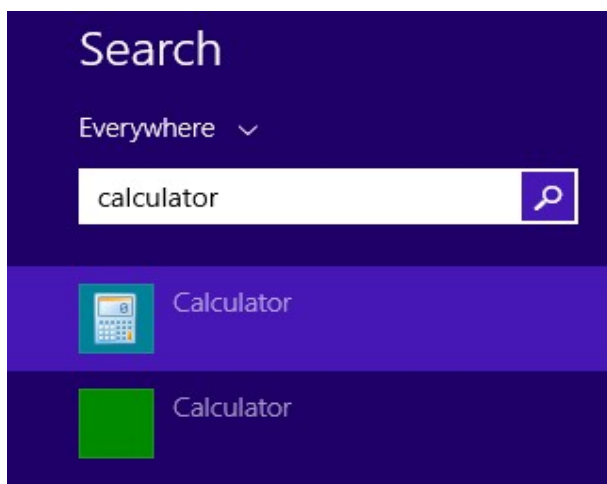
The command will be removed from the start screen

→ **Add and Remove programs from Taskbar (pin and unpin Apps on taskbar)**

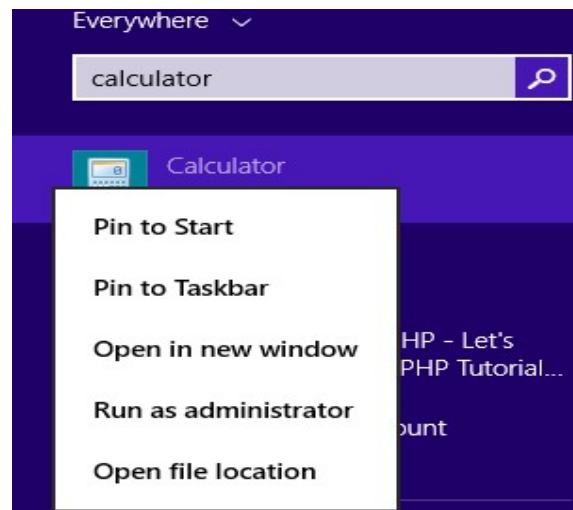


→ **Pin Calculator on taskbar**

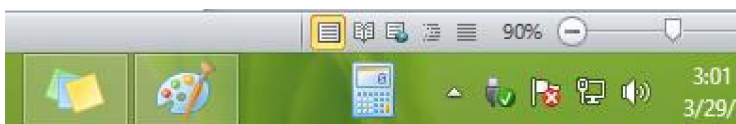
- a. Click on start or press Window key on your keyboard
- b. Type calculator, this could bring the result below:



- c. Right click on calculator and select **Pin to taskbar**



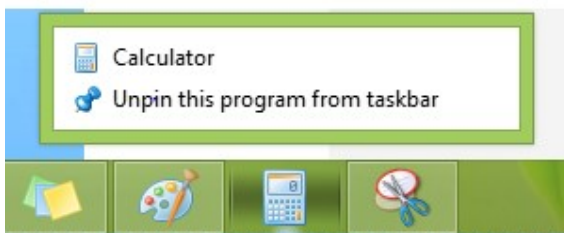
The calculator is added as shown below:



#### → **Remove or Unpin a program from TaskBar**

Unpin the **Calculator** from the taskbar

- Right-click on the **calculator** in the taskbar
- Select Unpin this program from taskbar



The program **calculator** is removed from the **taskbar** as shown below:



# Ahmadu Bello University, Zaria

## Department of Computer Science

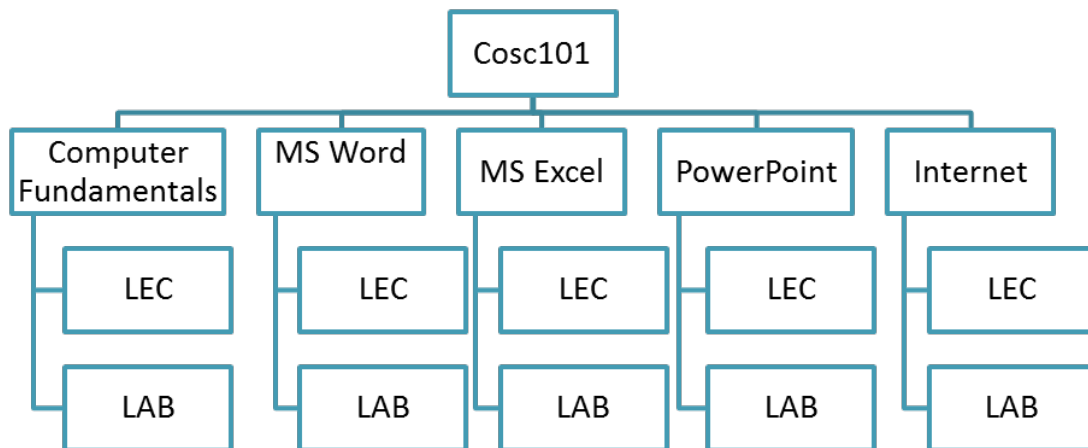
### COSC101: Introduction to Computing

---

#### Laboratory for Week 03: Operating Systems2

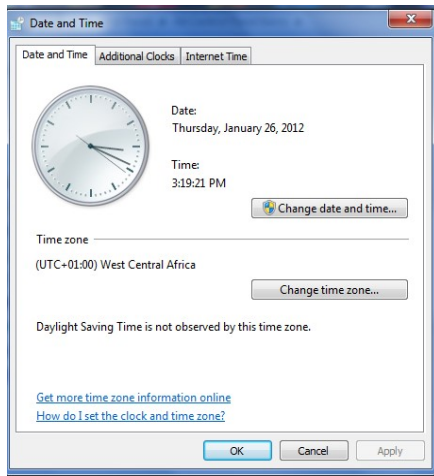
##### Exercise 1:

- Locate a free space at the **DESKTOP** of your system
- Create a folder called **COSC 101**
- Double click on the **COSC 101** folders to open it.
- Create Five more folders called **COMPUTER FUNDAMENTALS**, **MS WORD**, **MS EXCEL**, **POWERPOINT** and **INTERNET RESPECTIVELY**.
- Create two additional folders called **LEC** and **LAB** for lecture and Laboratory respectively.
- Click and Drag **LEC** into **COMPUTER FUNDAMENTALS** Folder, drag **LAB** also into that folder
- Repeat the same procedure in items e & f but this time drag those folders into **MS WORD**, **MS EXCEL** and **POWERPOINT** folders.
- Double click **INTERNET** folder to open it
- Create the **LEC** and **LAB** in the **INTERNET** folder as depicted in the diagram below



## Exercise 2: Setting date & time

- a. Click the **START** button
- b. Click on **CONTROL PANEL**
- c. **Locate and Click on “CLOCK, LANGUAGE AND REGION”** option
- d. **Locate and double Click on DATE AND TIME**. A dialog box like the figure below will appear.



- e. Click the **“CHANGE DATE AND TIME”** button
- f. Reset back your **DATE** to 05/10/11 and your **TIME** to 10:30pm
- g. Click **OK** twice to confirm your changes.
- h. View you new date and time at the task bar.
- i. Reset your **DATE/TIME** back to current date and time.

## Exercise 3: The Run Command

The RUN command is accessed in two ways:

1. through the Start menu and
2. through the short cut key **Win + R** on the key board (i.e. windows Key + R)

Now, use the **RUN** Command to lunch the following applications:

- a. mspaint (Microsoft Paint)
- b. calc (Calculator)
- c. winword ( Microsoft Word)
- d. powerpnt (PowerPoint)

# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 04: Text and Paragraph Formatting

#### Laboratory Objectives

The aims of this laboratory practical is to ensure students are able to create an MS word document, type in text and apply *text and paragraph formatting*.

#### Instructions

1. You will create an MS Word file named **YourRegNo-cosc101-Lab01.doc**, where you will replace **YourRegNo** with your university Registration Number. For example, if your Registration Number is **U20CS1089**, the file name will be **U20CS1089-cosc101-Lab01.doc**.
2. You will follow the steps outlined below and perform the exercise and save in the file created in Step 1.
3. You will create a directory **LabMSWord** and save the file in Step 1 inside this directory.
4. Keep repeating the save operation after few minutes to avoid losing data in case of an abrupt power failure
5. You will submit your completed exercises to your Lab instructor before you leave the lab class. Your instructor will advise you how to submit completed exercises.

#### Hands-on Guide

##### Task 1

1. On the Document window, type the text below as it is .

#### Introduction to Microsoft word

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

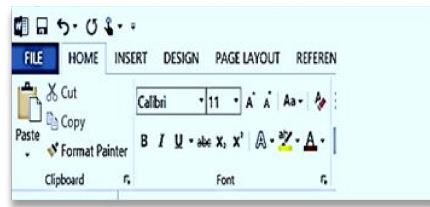
You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

2. Triple click on the topic sentence of your document to select it



3. On the Font Group of the Home Ribbon Click the **B** icon to make the topic sentence bold

4. Click the drop down arrow beside the number 11. Numbers will appear vertically arranged, select 18.



5. Click the drop down arrow on the left hand side of the writing 'Calibri', a list of font styles will appear, select Georgia to apply.

6. Click on the drop down arrow on the left hand side of the icon that carries the symbol **A** with a thick red line under, a list of colours will appear, select the blue colour on which is the fourth in the first row of the colour palette displayed.

7. Click on the dropdown arrow besides the icon that carries the symbol **Aa**, select UPPER CASE to make the topic sentence appear in capital letters.

8. On the first paragraph of the text hold down CTRL key on your keyboard and click on the second sentence to select it.

9. On the Font Group of the Home Ribbon Click on the symbol of **I** to italicise the selected text.

10. A description of what an icon does flips up immediately you put your mouse pointer on it. Move the mouse pointer over the icons of the Font group. Click on the drop down Arrow besides the icon that shows the description, 'Text highlight Colour'. Colour palette will be displayed, select red colour to apply on the selected text.

11. Again select the topic sentence of your document. Move to Paragraph Group next to the Font Group and run your mouse over the icons. Click on the icon that shows the description, **Center (Ctrl + E)**. The topic sentence will be centralised on your document page. Alternatively after selecting the topic sentence you can press CTRL key, hold it down and press the letter E, to achieve the same effect.



12. Place your cursor before the first letter of your first paragraph.

13. Hold down SHIFT key on your Keyboard and press the DOWN ARROW key to select the text till the end of the second paragraph.

14. Move to Paragraph Group next to the Font Group and move the mouse pointer over the icons until the icon description shows **Line Spacing**. Select 2.0 to have double lines space on your document text.

15. Triple click on the first paragraph to select it and move the mouse pointer over the icons until the icon description shows **Align Text Right (Ctrl + R)**. The paragraph will be aligned right on your document page. Alternatively after selecting the paragraph you can press CTRL key, hold it down and press R on the key board.

16. Triple click on the second paragraph to select it and move the mouse pointer over the icon description shows **Align Text Left (Ctrl + L)**. The paragraph will be aligned left on your document page. Alternatively after selecting the paragraph you can press CTRL key, hold it down and press L on the key board.

17. Go back to select the first paragraph and do as in step 10 until the icon description indicates anything **border**, then click on the drop down menu besides the icon and select **outside borders**. The paragraph will be en-squared in a border.

18. When you are done your document will look like this:

## INTRODUCTION TO MICROSOFT WORD

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. *You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks.* When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

### Task 2:

1. Type the following text as it is:

### Components of Microsoft window

Ribbons

Title Bar

Document area

Task bar

Status Bar

### Types of Computer

Mini Computer

Mainframe Computer

Personal Computer



2. Select the first bolded item **Component of Microsoft window**. While that is still highlighted move to the second item and place your cursor at the beginning of the line. Hold down CTRL key and select the second . The two items will be both highlighted.
3. Move to Paragraph Group next to the Font Group and do as in step 10 in the previous exercise until the icon description shows **Multilevel List**. Click on the drop down arrow attached to the icon a menu will appear as shown in the corresponding image.
4. Click on the second item under list library. The bolded items will appear in a list of 1 and 2.
5. Select the next items after **Component of Microsoft window**.
6. Do as in step 3 above and when the menu appears click on the current list. All the 5 items will be numbered but not on the same level with the other two items.
7. Do as in step 6 above for the items under **Types of computer**
8. Your output should look like this:

**1) Components of Microsoft window**

1. Ribbons
2. Title Bar
3. Document area
4. Task bar
5. Status Bar

**2) Types of Computer**

1. Mini Computer
2. Mainframe Computer
3. Personal Computer

**Task 3: Take Home Assignment**

1. Create a document of your own and save it in the format above but add take home in the document name.
2. Type a three paragraphed text and apply text formatting from Font Group from the icons that this lab covered and those it did not cover.
3. Similarly study the Paragraph Formatting Group and do the same to your created document.
4. Create a MultiLevel List of items up to 5 levels
5. Submit before the next lab.

# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 05: Tables and Graphics

##### Laboratory Objectives

The aims of this laboratory practical are to ensure students are able to *create tables and insert graphics* in an MS word document.

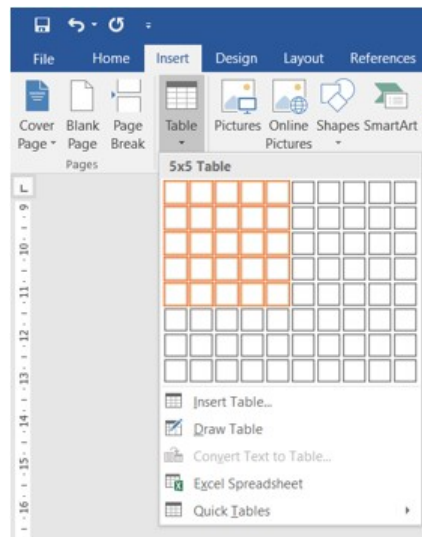
##### Instructions

1. Open the document you've created in your last week's lab and save it afresh with this format **YourRegNo-cosc101-Lab02.doc** with reference to the instructions given earlier. Note the change on Lab01 to Lab02.
2. You will follow the steps outlined below and perform the exercise and save in the file created in Step 1.
3. You will save in the same directory **LabMSWord** you've created earlier.
4. Keep repeating the save operation after few minutes to avoid losing data in case of an abrupt power failure
5. You will submit your completed exercises to your Lab instructor before you leave the lab class. Your instructor will advise you how to submit completed exercises.

##### Task 1: Create and format Table

1. Insert a table after your last week's take home exercise. Locate the **insert** tab on the menu bar and click it. The **Insert Ribbon** will appear:
2. Click the Table Group and select from the drop down menu an 8 rows by 4 columns table Enter the following labels (column headings) into the first row of the table:  
**NAMES STATE AGE DATE OF BIRTH**
3. Enter text to correspond to the column headings.
4. Align the text of each column to the centre.
5. Bold the title in each column of the table and use 12 font sizes.
6. Make the background of the first row Dark blue.

The final table should look like this:



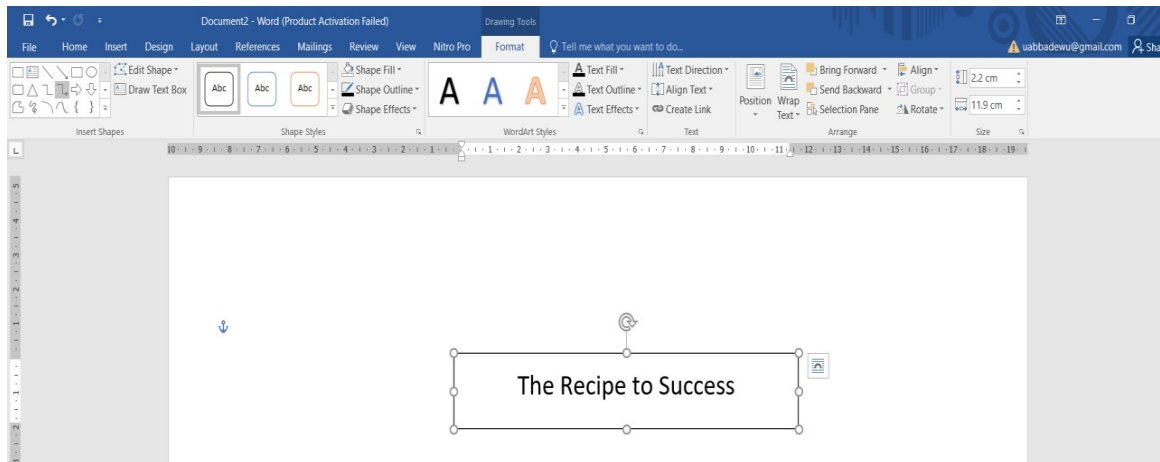
Names	State	Age	Date of Birth
Abacha	Kano	105	12-03-1935
Obasanjo	Osun	15	02-05-1995
Yar'dua	Katsina	20	06-09-1990
Goodluck	Bayelsa	87	01-01-1993
Babangida	Niger	25	15-05-1890
Buhari	Katsina	10	05-10-1940
Murtala	Kano	5	02-05-1840

## Task 2: Insert Graphics

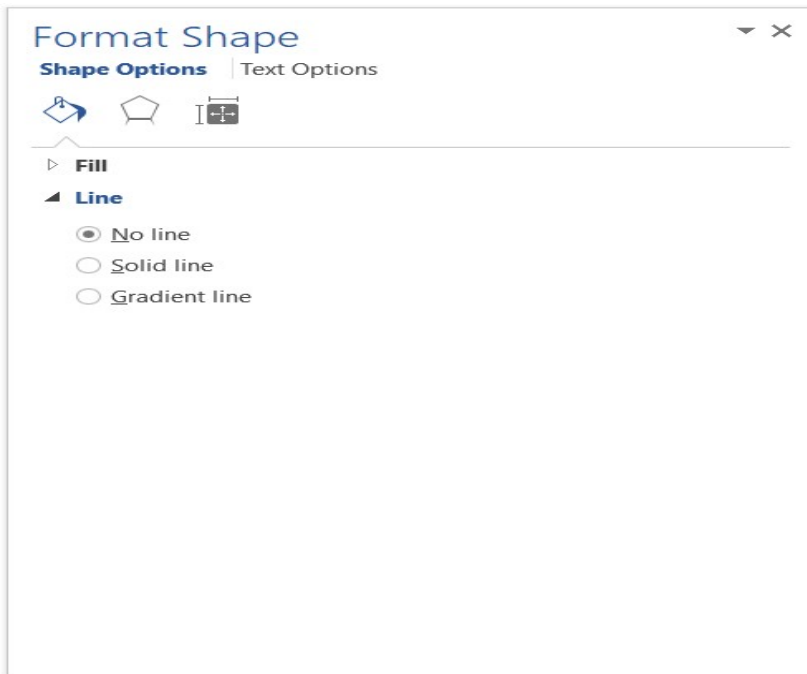
1. Go to the next blank page in your document and place your cursor on the Editing window.
2. Click the **Insert** tab.
3. Click the **Shapes button**. Choose a shape (e.g. a box) and insert it in the Editing window. Stretch out the shape to the size you desire. Drawing Tools will appear (above the Format tab on the Ribbon) when you finish drawing your shape. Using the drawing tools, you can format your shape and design it nicely.



4. Right click on the shape and choose 'Add text'. Type "The recipe to success" in the text box.

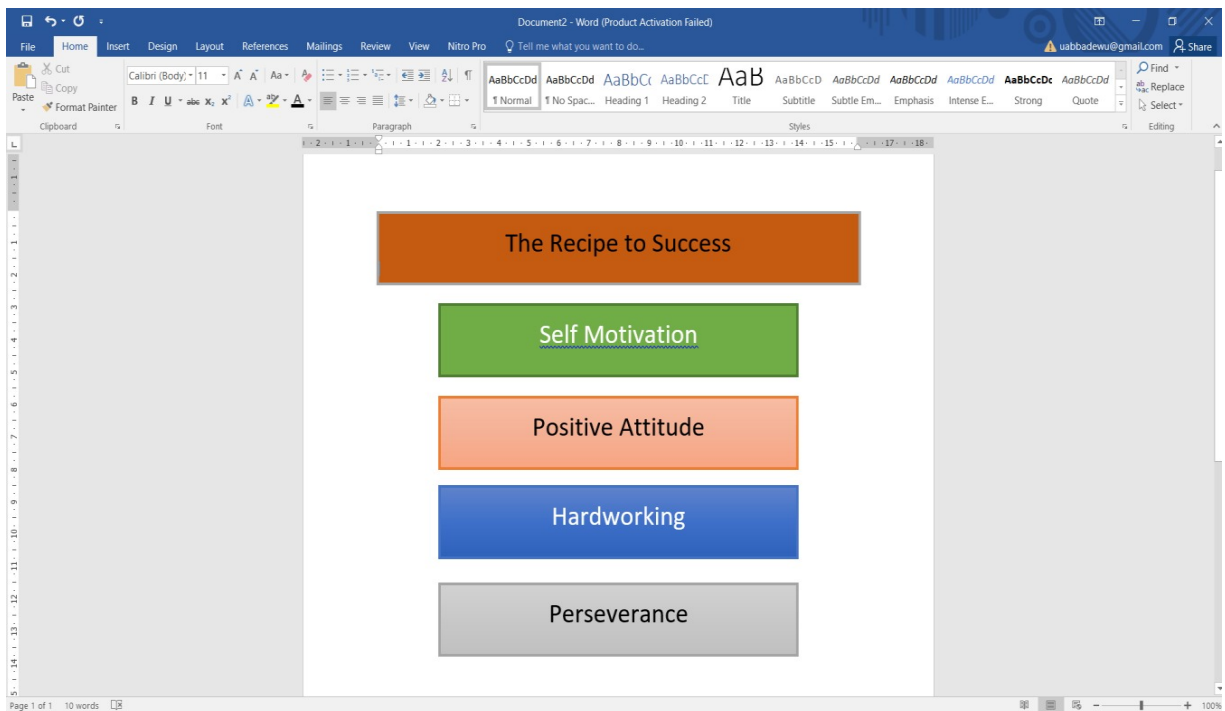


5. Now, create four more boxes (containing the word: Self Motivations, Positive Attitude, Hardworking, and Perseverance). To make the outline of the box disappear, right click the text box, select **Format Shape**. Under the **Shape Options Tab**, **Collapse Line**, choose **No Line** option.



Yours should look like this:

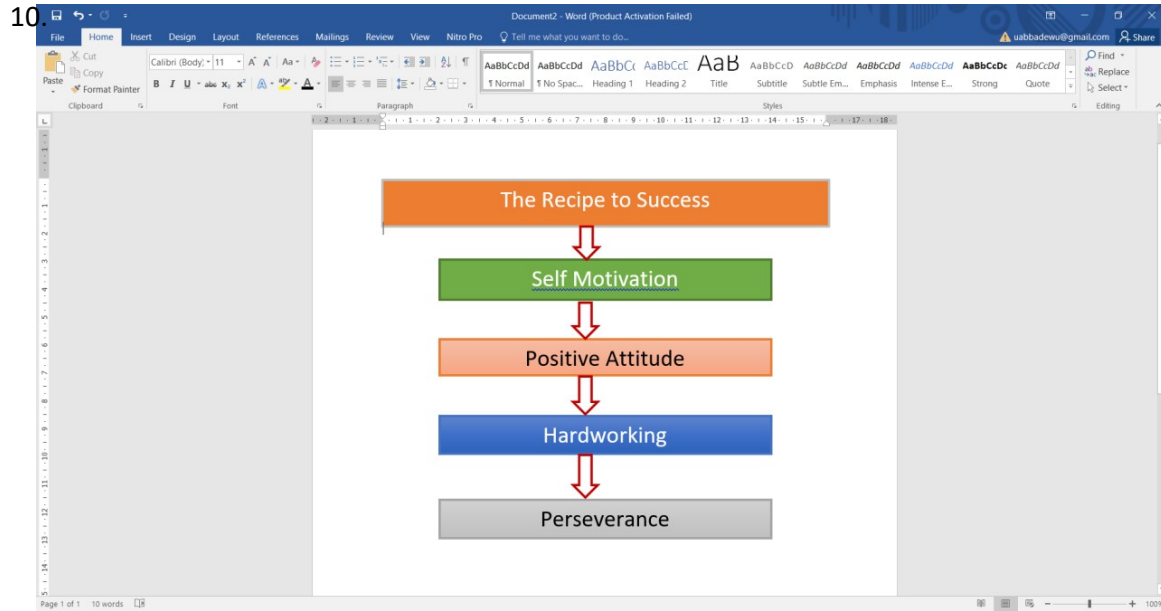
6. Now, from the **Drawing tools**, click on the **Format, Insert Shape-> Block Arrows** and choose your desired arrow style.
7. Place the arrow (vertically) between the first and the second box.



8. Repeat the steps until you have the following diagram (tips: you could just copy and paste the arrow):

### Task 3: Group the Objects

9. One of the concern issues is that if you want to position or reposition the diagram, you need to move each of the objects one by one, which could be quite time consuming. What you can do is to **group** all the objects in the diagram. In order to do this, hold the **SHIFT** key and click on each of the objects.



11. Once you are done, point your cursor to the selection until a cross symbol appear. **Right click**. From the pull down menu, choose **Grouping -> Group**. (You could ungroup or regroup using the similar steps).



12. Now if you move one object, the rest of the objects will follow

**Task 4: Insert Header and Footer and Page Number**

13. Go to Header and Footer on the **Insert Ribbon**. Select the header and click on first option and type your Matric Number. Click on the footer area on the same page and type your full name.
14. Go to **Page Number** on the **Header and Footer group** of the **Insert ribbon**, click on bottom page number and select the first option.



# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 06: Table of Contents, References and Citations, Mail Merge

#### Laboratory Objectives

The aims of this laboratory practical are to ensure students are able to use a given document to create Table of Contents, generate table of references and citations and also experiment with Mail Merge.

#### Instructions

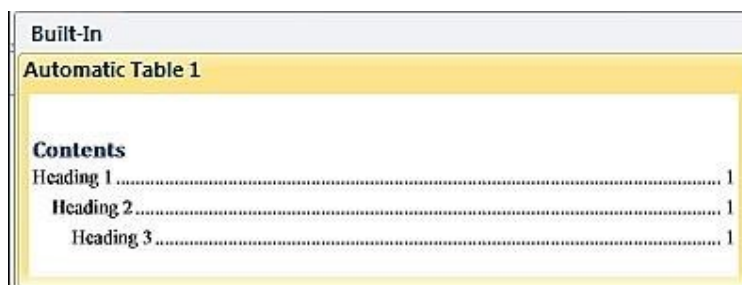
1. Download from the link [www.abu.edu.ng/iacc](http://www.abu.edu.ng/iacc) the required document for this lab and save it as **YourRegNo-cosc101-Lab05.doc** with reference to the instructions given earlier. Note the change on Lab01 to Lab05.
2. You will follow the steps outlined below and perform the exercise and save in the file created in Step 1.
3. You will save in the same directory **LabMSWord** you've created earlier.
4. Keep repeating the save operation after few minutes to avoid losing data in case of an abrupt power failure
5. You will submit your completed exercises to your Lab instructor before you leave the lab class. Your instructor will advise you how to submit completed exercises.

#### Task 1: Create Table of Contents

The easiest way to create a table of contents is to use the built-in heading styles. You can create a table of contents that is based on the custom styles that you will add to your document. For example you might only want a Heading 1 in your Table of Contents, or both Heading 1 and Heading 2.

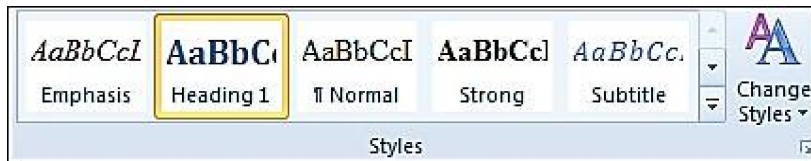
#### Step1: Mark Entries By Using Built-In Styles or Modify Styles

If your document is already created then select the words to which you want to apply a heading style to, which when the **Table of Contents** is added will list as the first indent or **Heading 1** as shown below. If it is a brand new document you are building then each time before you start typing choose Heading1 style for it to appear in your **Table of Contents**.

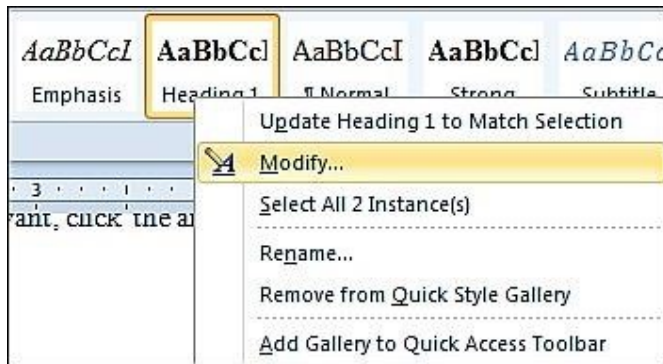


Built-In	
Automatic Table 1	
<b>Contents</b>	
Heading 1 .....	1
Heading 2 .....	1
Heading 3 .....	1

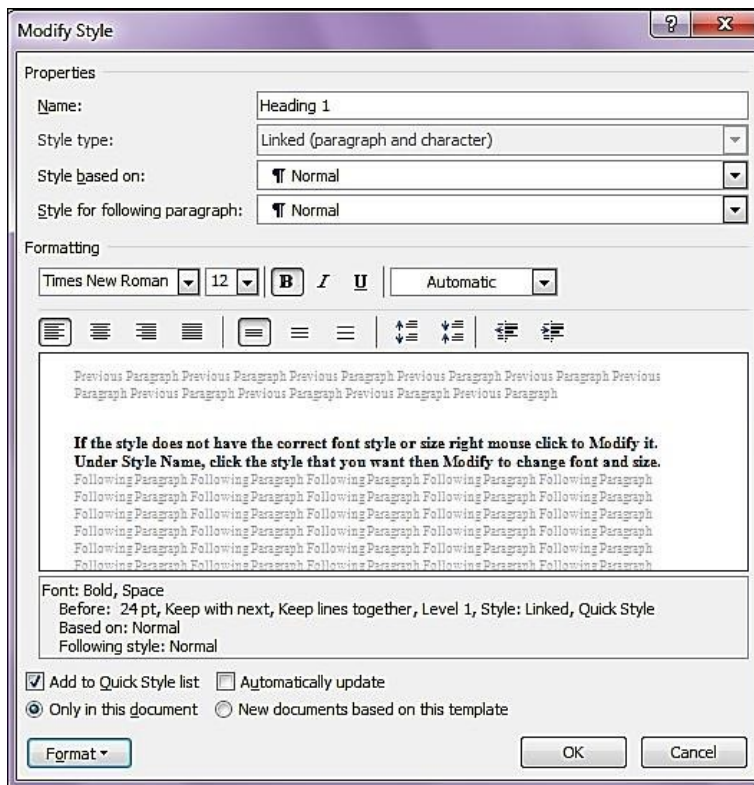
Select the text, then on the **Home** tab, in the **Styles** group, click the **Heading 1** style. This will change that text to be a style for the **Table of Contents**.



If the style for **Heading 1** does not have the correct font, size and color you can change it by right mouse clicking and choose **Modify** in the Styles gallery.



Under **Name**, you can change it or leave as **Heading 1**. The **Formatting** area is where you will change the Font type, size and color. Notice at the very bottom you can choose **Only in this document** or **New documents based on this template**. Click **OK** when finished. Your **Heading 1** style will now be changed on the **Styles Gallery**.



If you know you want to use **Heading 2**, then **Modify** that style to reflect the **Formatting**

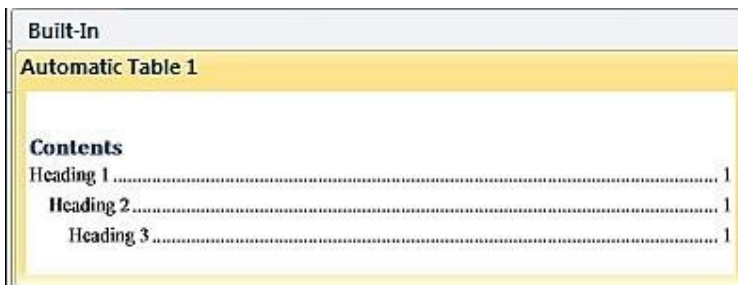
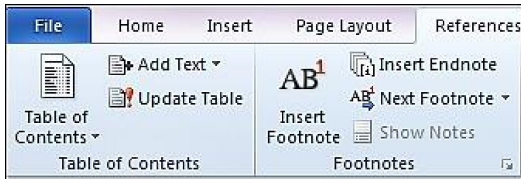
you want. Click **OK**.

## Step 2: Now Create A Table Of Contents

Now that your document has styles added to specific entries for your table of contents you are ready to add a **Table of Contents**.

Click where you want to insert the table of contents, at the beginning of a document. If you need to add a blank page at the beginning, click on **Insert** tab, **Blank Page**. Have your cursor sitting at the place you want to table to be.

On the **References** tab, in the **Table of Contents** group, click **Table of Contents**, and then click on the table of **Contents** style that you want which will insert it.



A **Table of Contents** will now appear as shown below.

<b>Contents</b>	
Mark Entries By Using Built-In Styles or Modify Styles .....	2
Now Create A Table Of Contents .....	4
Update The Table Of Contents .....	5
Delete A Table Of Contents .....	5

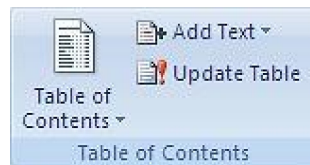
## Update a Table of Contents

If you already have a table of contents in your document, but now you have edited the text by either adding or taking away text, which will make a change in your page numbers in your **Table of Content** change, then you will need to update the table of contents. Hold your mouse over the **Table**

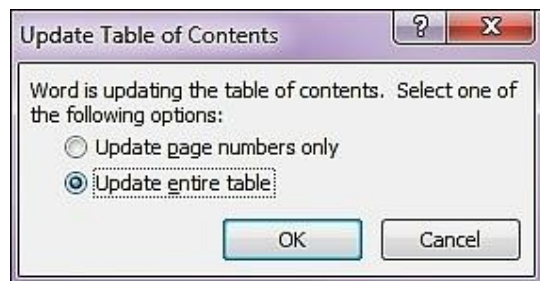
of **Contents** and it will appear blue as shown below. Just click someone in that area to select the **Table of Contents**.

<b>Contents</b>	
Mark Entries By Using Built-In Styles or Modify Styles.....	2
Now Create A Table Of Contents.....	4
Update The Table Of Contents.....	5
Delete A Table Of Contents.....	5

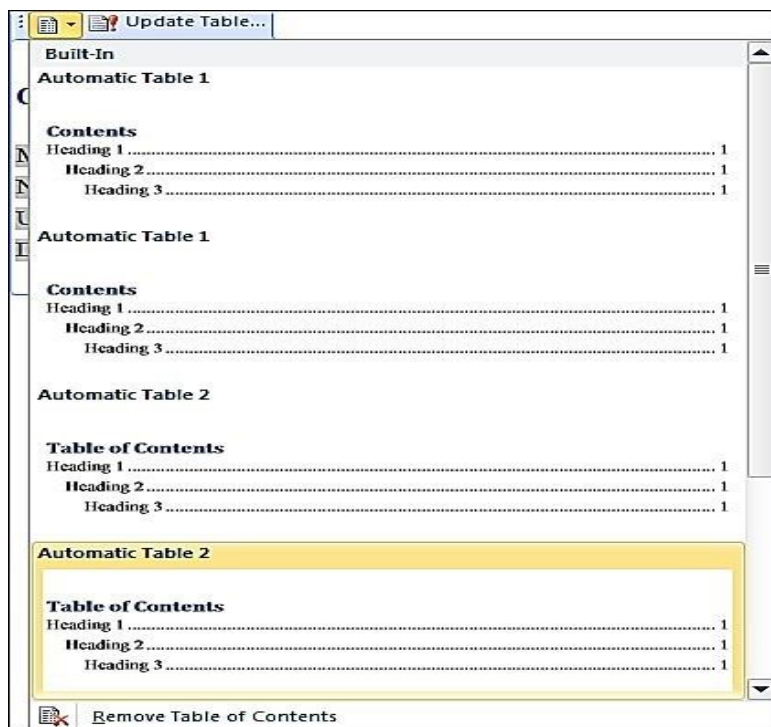
On the **References** tab, in the **Table of Contents** group, click **Update Table**.



Click **Update page numbers only** or **Update entire table**. Click **OK**.

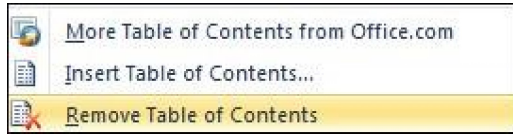


You can also click on the **Update** from within the table on the document as shown below. To the left of Update it a drop down arrow that allows you to change they type of Table of Contents.



## Delete a Table of Contents

On the **References** tab, in the **Table of Contents** group, click **Table of Contents**.

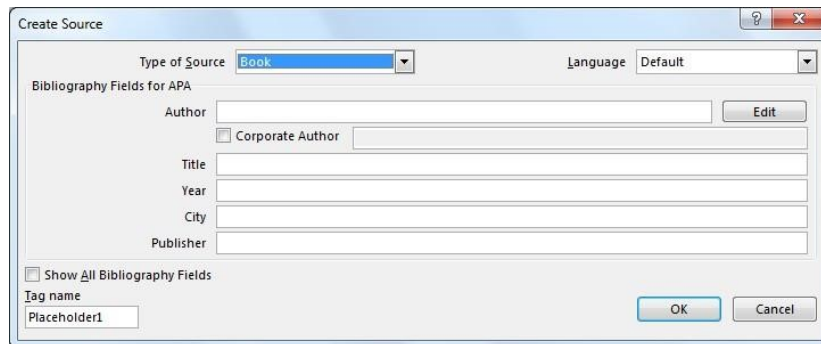


Click **Remove Table of Contents**. You can also **Remove Table of Contents** on the **Update** drop down as shown on screen shot above.

## Task 2: Inserting a Reference

To insert a reference (a citation) in your text:

1. Start by typing some text (anything will do)
2. Move to the **REFERENCES** tab on the Ribbon and note the Citations and Bibliography group:
3. Click on **[Insert Citation]** and choose **Add New Source...** - the Create Source dialog box appears:

A screenshot of the 'Create Source' dialog box in Microsoft Word. The 'Type of Source' dropdown is set to 'Book'. The 'Language' dropdown is set to 'Default'. Under 'Bibliography Fields for APA', there are input fields for Author, Title, Year, City, and Publisher. An 'Edit' button is next to the Author field. A 'Corporate Author' checkbox is also present. At the bottom, there is a 'Show All Bibliography Fields' checkbox which is checked, and a 'Tag name' field containing 'Placeholder1'. 'OK' and 'Cancel' buttons are at the bottom right.

4. Using the list arrow provided set the **Type of Source** to whatever is required – here keep it as **Book**
5. Fill in the Bibliography Field for APA (use the example provided here or add your own reference):
  - ☐ **Author:** Mickey Mouse (press <Tab> three times)
  - ☐ **Title:** A History of Cartoons (press <Tab>)
  - ☐ **Year:** 2010 (press <Tab>)
  - ☐ **City:** Hollywood (press <Tab>)
  - ☐ **Publisher:** Disney Press

6. Press <Enter> for [OK] when you have completed the entry – your reference appears in the text as (Mouse, 2010)

For some references, you may need to record additional fields. This next example shows you how:

7. Repeat steps 1 to 4 again, as above

8. Now turn on **Show All Bibliography Fields** - note what's available

9. Fill in the Bibliography Fields as below (or use one of your own references):

- ☐ **Author:** Click on Corporate Author and type **British Broadcasting Corporation**
- ☐ **Title:** **Cartoon Classics**
- ☐ **Year:** **2000**
- ☐ **City:** **London**
- ☐ **Publisher:** **BBC Publications**
- ☐ **Pages:** **1-34**
- ☐ **Edition:** **2nd Edition**

10. Press <Enter> for [OK] – your reference appears in the text as (British Broadcasting Corporation, 2000)

By using a Corporate Author, spaces in the author's name are ignored and the author appears in full.

If you have a real author with a space in their surname (eg Paul St John), you must use a non-breaking space for the space. This special character can be typed using <Ctrl Shift spacebar>.

11. Repeat steps 1 to 4 again but change the Type of Source to a **Journal Article**

12. Fill in the following Bibliography Fields as below (or use one of your own references):

- ☐ **Author:** **Mouse, Mickey; Duck, Donald** (use a semi-colon to separate more than one author and note that you should enter names in the format surname, first\_name)
- ☐ **Title:** **Drawing Cartoon Characters**
- ☐ **Journal Name:** **Cartoon Journal**
- ☐ **Year:** **1996**
- ☐ **Pages:** **132-147**

13. Turn on **Show All Bibliography Fields** and add

- ☐ **Volume:** **23**

14. Press <Enter> for [OK] – your reference appears as (Mouse & Duck, Drawing Cartoon Characters, 1996)

Normally, you wouldn't include the Title but this particular referencing style does. You'll see how to change

this later. Try adding one further reference:

**15. Repeat steps 1 to 4 again but change the Type of Source to a Web site**

**16. Fill in the following Bibliography Fields as below (or use one of your own references):**

- ☐ **Name of Web Site: Mickey Mouse – The Official Site**
- ☐ **URL: <http://disney.go.com/mickey>**

### Using a Placeholder

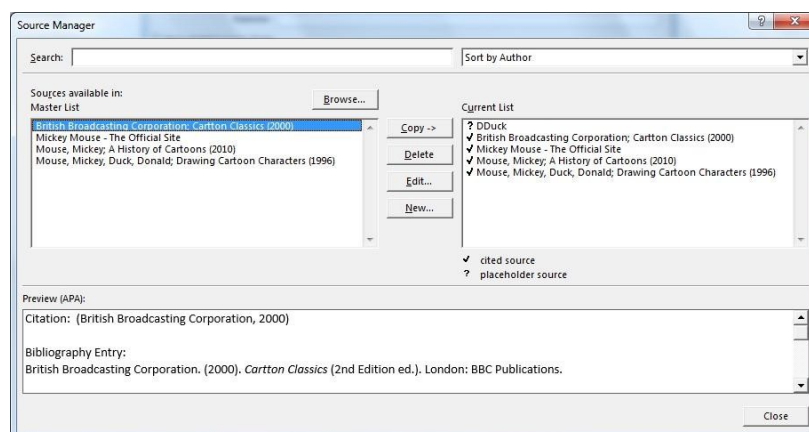
If you want to add a reference but do not have the full details with you, you can add it as a placeholder. You can then subsequently edit this with the details (you'll be doing this later). To create a placeholder:

1. First, type in some more text
2. Click on **[Insert Citation]** and choose **Add New Placeholder...** - a Placeholder Name dialog box appears
3. Type in a meaningful name (spaces and periods are not allowed) – eg **DDuck**
4. Press <Enter> for **[OK]** to close Placeholder Name – your reference appears as (DDuck)

### Managing Sources

The **[Manage Sources]** button in the Citations & Bibliography group allows you to edit and delete references from your master list. Another facility lets you add a new reference without including it as a citation. You can also copy references into a document from another master list:

1. On the **REFERENCES** tab, click on **[Manage Sources]** – the Manage Sources dialog box appears:





Note that you have a Current List of the references in the document you are working on and a Master List of all your references. References which have already been cited in the text have a tick against them; the placeholder is shown with a question mark against it. It's now time to turn the placeholder into a reference:

2. Select the placeholder reference (DDuck) and **[Edit...]** it
3. If necessary, change Type of Source to **Web site**
4. Type in the following Fields:
  - ☐ **Name of Web Page:** **Donald Duck**
  - ☐ **Name of Web Site:** **Wikipedia**
  - ☐ **URL:** **[http://en.wikipedia.org/wiki/Donald\\_Duck](http://en.wikipedia.org/wiki/Donald_Duck)**
5. Press **<Enter>** for **[OK]**

Currently, your new reference is only held in this document. To store it in your master list:

6. With the reference still highlighted, click on **[<- Copy]** to move it into the Master List  
You can also add new references here:
7. Click on the **[New...]** button - the Create Source dialog box appears, as before
8. Change Type of Source to **Conference Proceedings**
9. Add the following Fields:
  - ☐ **Author:** **Walt Disney**
  - ☐ **Title:** **The Early Days**
  - ☐ **Pages:** **2-19**
  - ☐ **Year:** **1970**
  - ☐ **Conference Publication Name:** **Third Disney World Conference**
  - ☐ **Publisher:** **Disney Press**

10. Press **<Enter>** for **[OK]** to add the reference to your current and master list

To remove a reference from the current document:

11. Select the new reference and **[Delete]** it from the Current List – don't worry, it's still in your Master List
12. Reinstate it by selecting it in the Master List and **[Copy ->]** it back
13. Finally, **[Close]** the Source Manager – you could also press **<Esc>**



### Inserting a Bibliography

1. Check that you are at the end of your text then press **<Enter>** for a new line
2. Click on the **[Bibliography]** button in the Citations & Bibliography group  
You can now choose from three built-in formats (Bibliography, References or Works Cited) or you can just insert the list of references using **Insert Bibliography**. Here, use the first built-in format:
3. Choose **Bibliography** – the references are listed with a heading of Bibliography

Note that all the references in the current list are shown (not just the ones cited – Disney is unticked). To remove the Disney reference (and then update the bibliography):

4. Click on **[Manage Sources]**, select the Disney reference in the Current List and **[Delete]** it
5. Press **<Esc>** to **[Close]** the Source Manager
6. Click on the bibliography – it is surrounded by a blue box with two buttons on the top
7. Click on the second button **[Update Citations and Bibliography]** and Disney is removed from the list

The first button (**[Bibliographies]**) lets you change the heading to References or Works Cited.

You don't have to use a built-in format. Try creating your own instead:

1. Drag through the Bibliography and **<Delete>** it – you may need to press **<Delete>** more than once
2. Next, type in your own heading: **List of References** and press **<Enter>**
3. Click on the **[Bibliography]** button and choose **Insert Bibliography**

A bibliography created this way doesn't have a blue box and buttons. To update it, simply right click on the list and choose **Update Field**.

## Styles

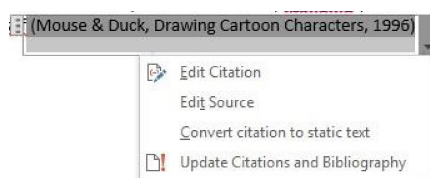
There are several referencing styles built in to Word. So far you have been using the default style, APA, but this might not give you the results you want. You can easily choose a different style, which will immediately be reflected both in your bibliography and the individual references:

1. First, click at the end of your text
2. Now click on the list arrow attached to the **[Style:]** button in the Citations & Bibliography group
3. Choose a different style (eg **Harvard** - perhaps the most commonly-used style) and note the effect
4. Repeat step 3 to see what some of the other styles are like (**ISO 690 – Numerical Reference** gives you just a number in the text and a numbered list of references)
5. End by setting **[Style:]** back to **APA**

Sadly, it's not possible to customise the built-in styles (or, indeed, to create your own). There is the facility, however, to convert your references and/or bibliography into editable text. You would only do this if you really needed to (and once you have finished your document and generated the bibliography).

To convert a reference to text:

6. Click on the Mouse & Duck reference in the main text – the reference is shaded with a blue box around it
7. Click on the arrow attached to the right of the blue box – a menu appears:



8. Choose **Convert citation to static text** - note that you can also edit the citation or source here
9. Remove the title of the paper Drawing Cartoon Characters, (drag through the words then **<Delete>** them)

10. Try changing the **[Style:]** –the reference in the text doesn't change, but the bibliography entry does

11. End by pressing **<Ctrl s>** to **[Save]** the latest version of your work

### **Adding References to Another Document**

Once you have a Master Source, you can use it to add references to other documents. Each document has its own set of references, which all appear in the bibliography (whether cited or not). To see this:

1. Press **<Ctrl n>** for a **[New]** document
2. Move to the **REFERENCES** tab and click on **[Manage Sources]**
3. Select the references you want in your new document from the master source on the left
4. If you have a lot of references, you may need to use of the **Search:** box or change **Sort by** to **Year** or **Title**

**Tip:** Hold down **<Ctrl>** and click to select non-adjacent references or use click and **<Shift>** click to select a group (just like you can throughout Microsoft – eg to select emails or files)

5. Click on **[Copy ->]** to move your references across – make sure you have more than one
6. Press **<Esc>** to **[Close]** the Manage Sources dialog box
7. Now type in some text then add a reference as before (**[Insert Citation]** and choose the one you want)
8. Finally, add the bibliography (click on **[Bibliography]** and choose **Bibliography**) Again, you'll find that all your references appear, not just the one cited.

### **Keeping your Master List**

You may wish to keep a copy of your master source file (the reference list in the document itself is). To copy the master source from its current location into My Documents and then link to it from there:

1. Click on **[Manage Sources]** on the **REFERENCES** tab
2. **[Browse...]** for the Source file (which is located in a special Bibliography folder on drive C:)
3. Right click on **Sources.xml** and choose **Copy**
4. Now click on **Documents** on the left
5. Right click in Documents library and choose **Paste**
6. Finally, press **<Esc>** twice to first **[Cancel]** then **[Close]** the Source Manager

You should now have a copy of the file in Documents. Next time you want to add references to a piece of work, use this file as your source file. In other words:

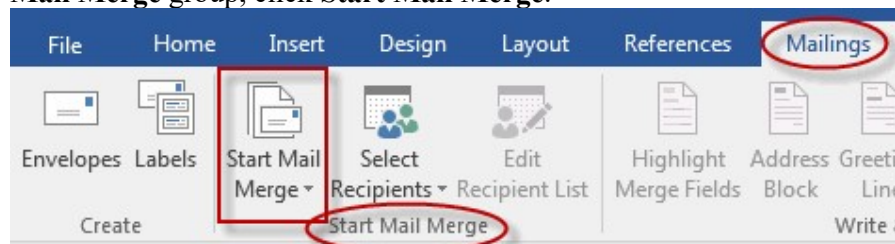
7. Repeat steps 1 and 2 as above
8. Next click on **Documents**
9. Select the file **Sources.xml** then press **<Enter>** to **[Open]** it
10. **[Copy ->]** the required references to your Current List then **[Close]** the Source Manager and continue as before (using **[Insert Citation]** etc)

### Task 3: Mail Merge

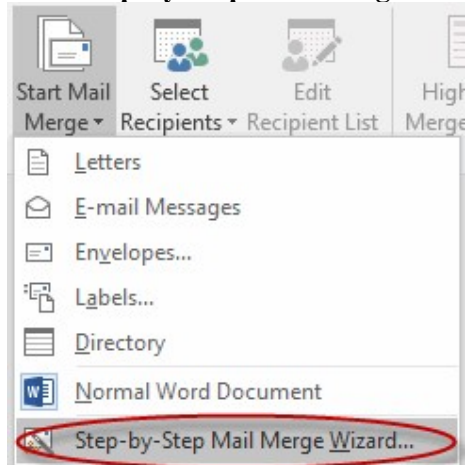
Mail Merge is most often used to print or email form letters to multiple recipients. Using Mail Merge, you can easily customize form letters for individual recipients. Mail merge is also used to create envelopes or labels in bulk.

This feature works the same in all modern versions of Microsoft Word: 2010, 2013, and 2016.

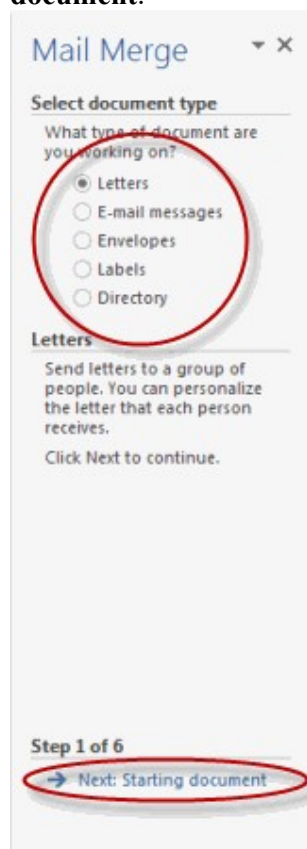
1. In a blank Microsoft Word document, click on the **Mailings** tab, and in the **Start Mail Merge** group, click **Start Mail Merge**.



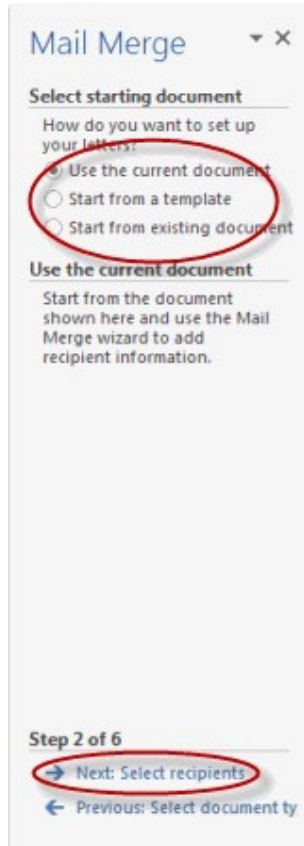
2. Click **Step-by-Step Mail Merge Wizard**.



3. Select your document type. In this demo we will select **Letters**. Click **Next: Starting document**.



4. Select the starting document. In this demo we will use the current (blank) document. Select **Use the current document** and then click **Next: Select recipients**.



Mail Merge

Select starting document

How do you want to set up your letters?

☒ Use the current document

☐ Start from a template

☐ Start from existing document

Use the current document

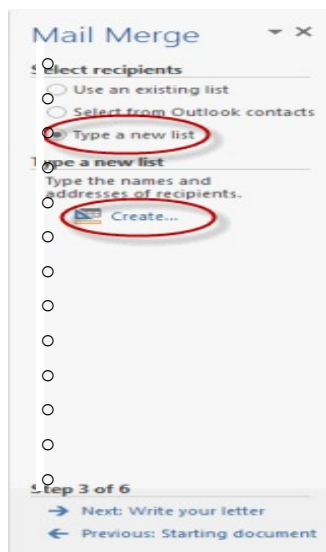
Start from the document shown here and use the Mail Merge wizard to add recipient information.

Step 2 of 6

→ Next: Select recipients

← Previous: Select document type

- Note that selecting **Start from existing document** (which we are not doing in this demo) changes the view and gives you the option to choose your document. After you choose it, the Mail Merge Wizard reverts to **Use the current document**.
5. Select recipients. In this demo we will create a new list, so select **Type a new list** and then click **Create**.



Mail Merge

Select recipients

☐ Use an existing list

☐ Select from Outlook contacts

☒ Type a new list

Type a new list

Type the names and addresses of recipients.

☒ Create...

Step 3 of 6

→ Next: Write your letter

← Previous: Starting document

- Create a list by adding data in the **New Address List** dialog box and clicking **OK**.

New Address List

Type recipient information in the table. To add more entries, click New Entry.

Title	First Name	Last Name	Company Name	Address Line 1

- Save the list.
- Note that now that a list has been created, the Mail Merge Wizard reverts to **Use an existing list** and you have the option to edit the recipient list.

Mail Merge

Select recipients

☒ Use an existing list  
☐ Select from Outlook contacts  
☐ Type a new list

Use an existing list

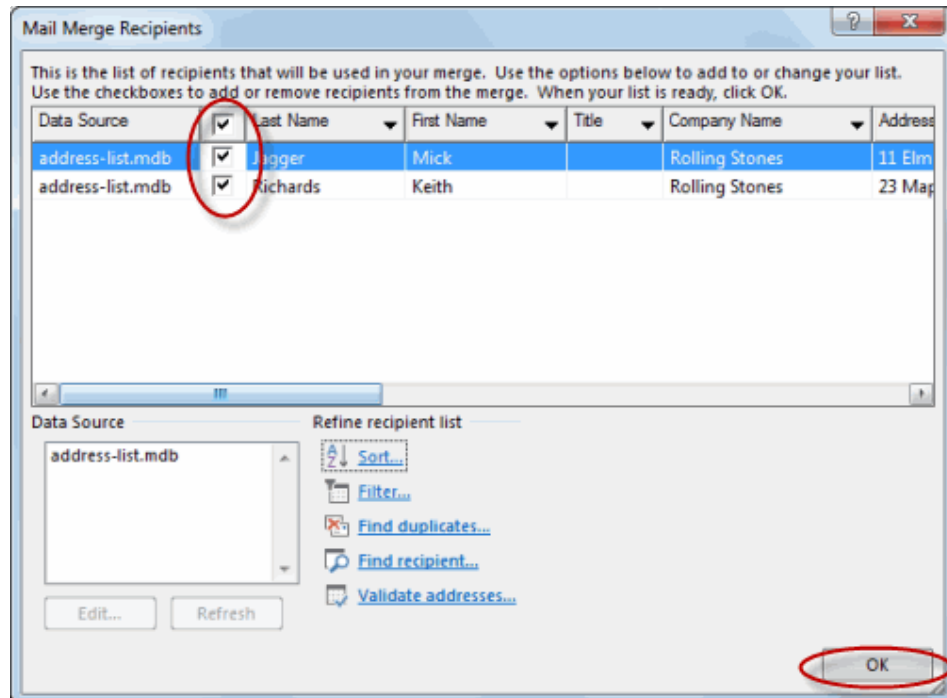
Currently, your recipients are selected from:  
[Office Address List] in "address-l"

☐ Select a different list...

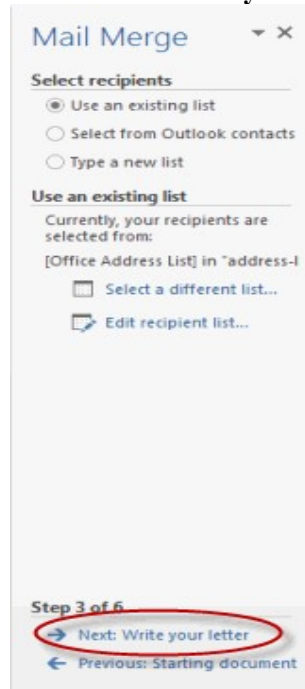
Step 3 of 6

→ Next: Write your letter  
 ← Previous: Starting document

- Selecting **Edit recipient list** opens up the **Mail Merge Recipients** dialog box, where you can edit the list and select or unselect records. Click **OK** to accept the list as is.

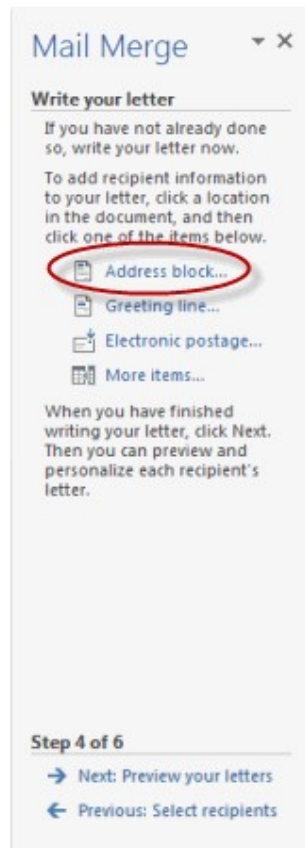


- Click **Next: Write your letter.**

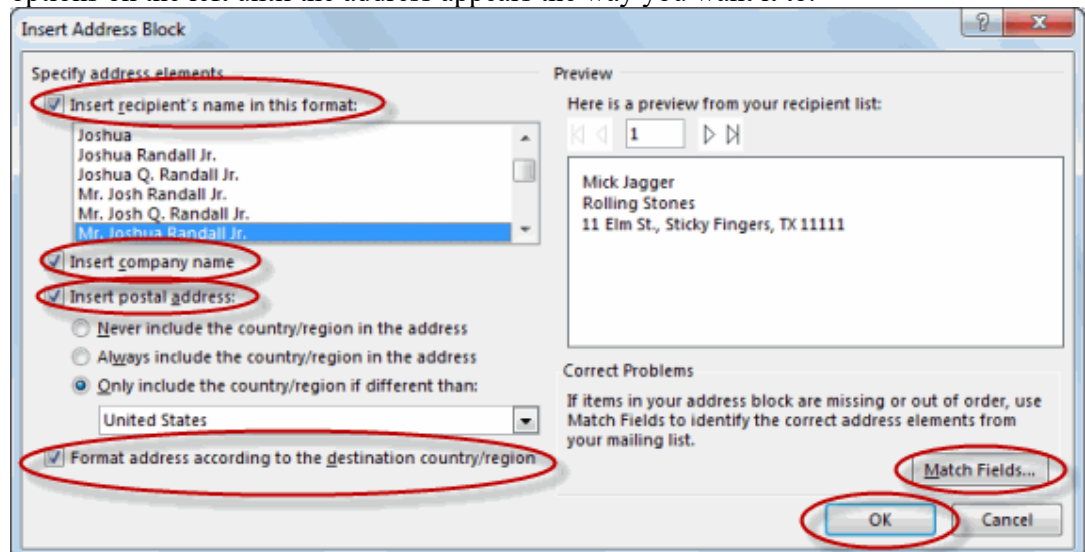




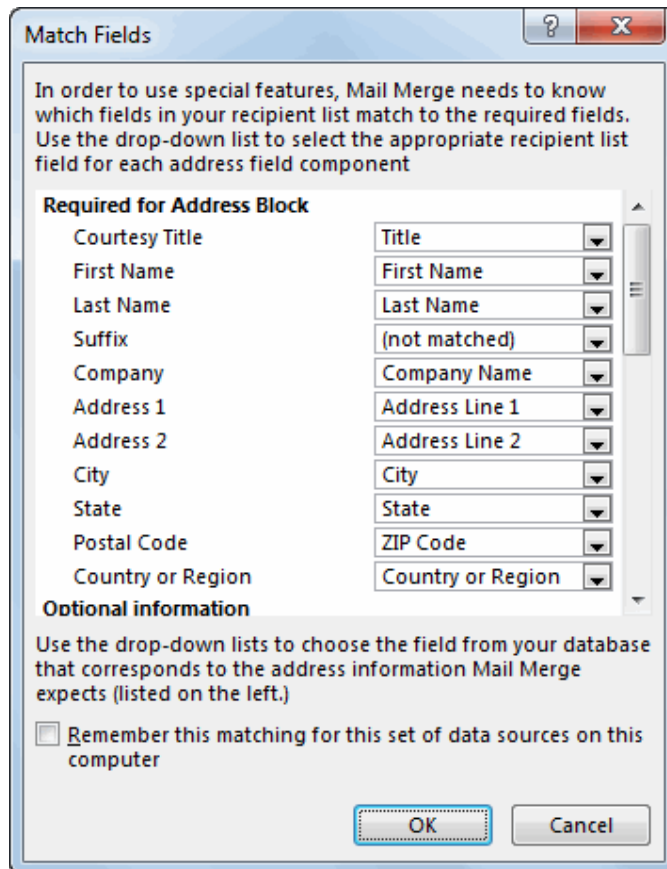
6. Write the letter and add custom fields.
  - Click **Address block** to add the recipients' addresses at the top of the document.



- In the **Insert Address Block** dialog box, check or uncheck boxes and select options on the left until the address appears the way you want it to.



- Note that you can use **Match Fields** to correct any problems. Clicking **Match Fields** opens up the **Match Fields** dialog box, in which you can associate the fields from your list with the fields required by the wizard.
7. Press **Enter** on your keyboard and click **Greeting line...** to enter a greeting.



The image shows a Windows-style dialog box titled "Match Fields". It has a standard title bar with a question mark icon and a close button (X). The main text inside the dialog reads: "In order to use special features, Mail Merge needs to know which fields in your recipient list match to the required fields. Use the drop-down list to select the appropriate recipient list field for each address field component". Below this text is a section titled "Required for Address Block" which contains a list of address components on the left and corresponding drop-down menus on the right. The components and their current selections are: Courtesy Title (Title), First Name (First Name), Last Name (Last Name), Suffix (not matched), Company (Company Name), Address 1 (Address Line 1), Address 2 (Address Line 2), City (City), State (State), Postal Code (ZIP Code), and Country or Region (Country or Region). Below this list is a section titled "Optional information" with the text: "Use the drop-down lists to choose the field from your database that corresponds to the address information Mail Merge expects (listed on the left.)". There is a checkbox labeled "Remember this matching for this set of data sources on this computer" which is currently unchecked. At the bottom of the dialog are two buttons: "OK" and "Cancel".

**Match Fields**

In order to use special features, Mail Merge needs to know which fields in your recipient list match to the required fields. Use the drop-down list to select the appropriate recipient list field for each address field component

**Required for Address Block**

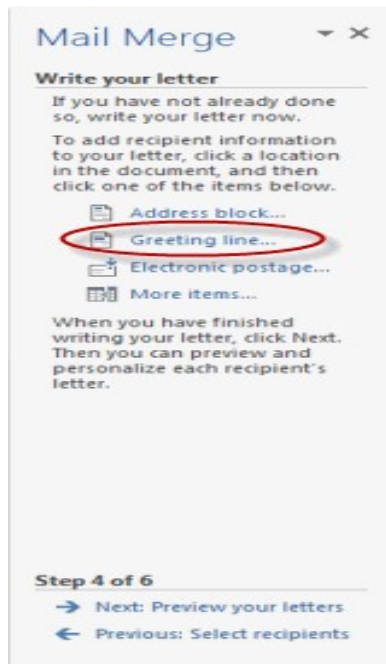
Courtesy Title	Title
First Name	First Name
Last Name	Last Name
Suffix	(not matched)
Company	Company Name
Address 1	Address Line 1
Address 2	Address Line 2
City	City
State	State
Postal Code	ZIP Code
Country or Region	Country or Region

**Optional information**

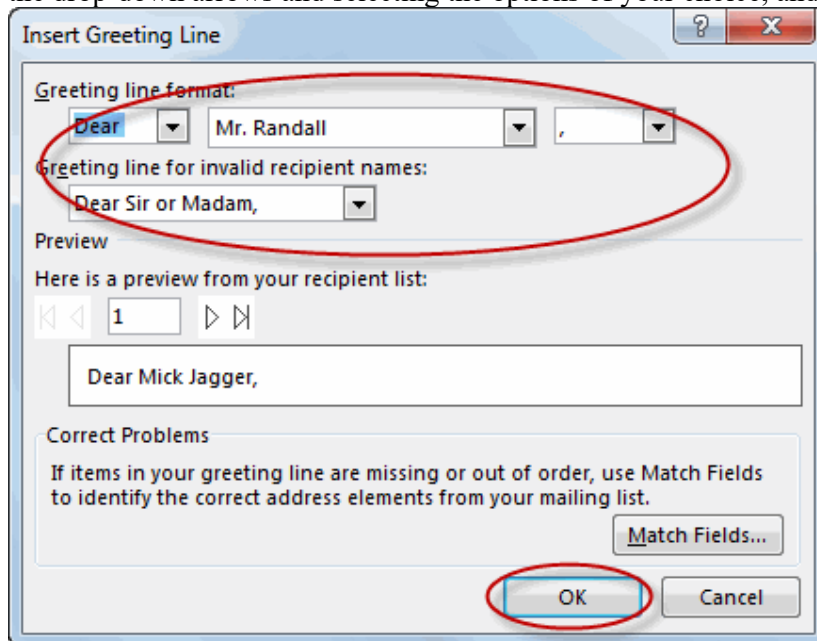
Use the drop-down lists to choose the field from your database that corresponds to the address information Mail Merge expects (listed on the left.)

☐ Remember this matching for this set of data sources on this computer

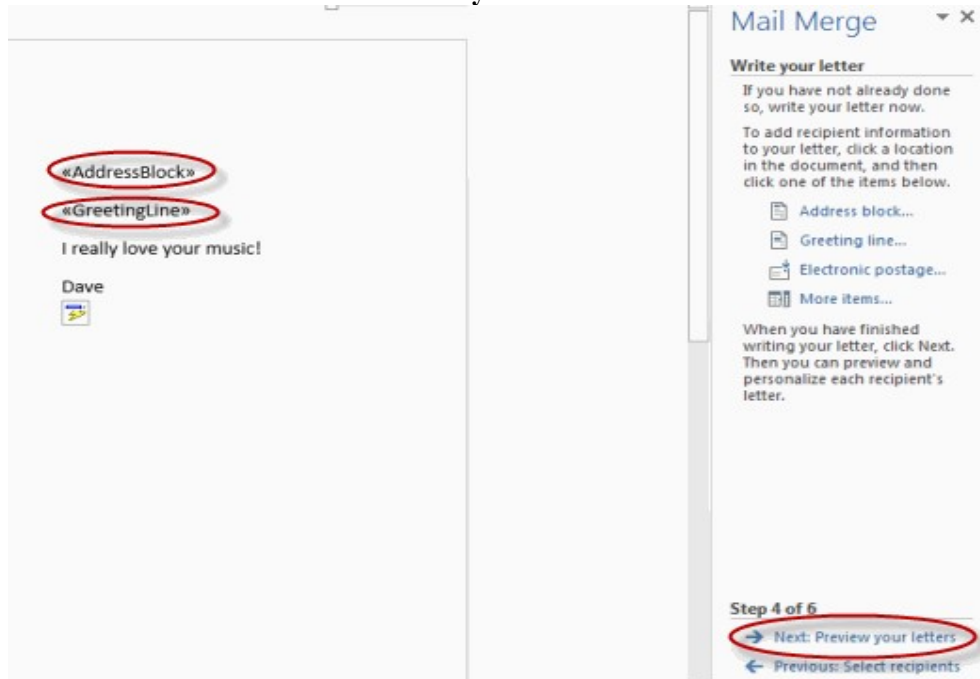
OK Cancel



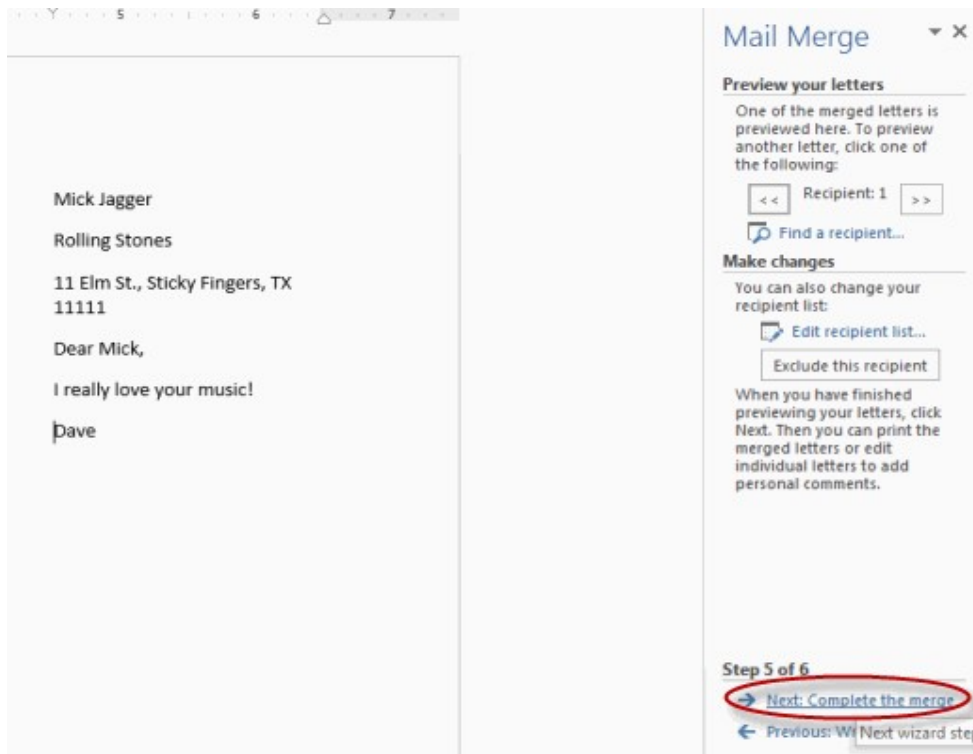
8. In the **Insert Greeting Line** dialog box, choose the greeting line format by clicking the drop-down arrows and selecting the options of your choice, and then click **OK**.



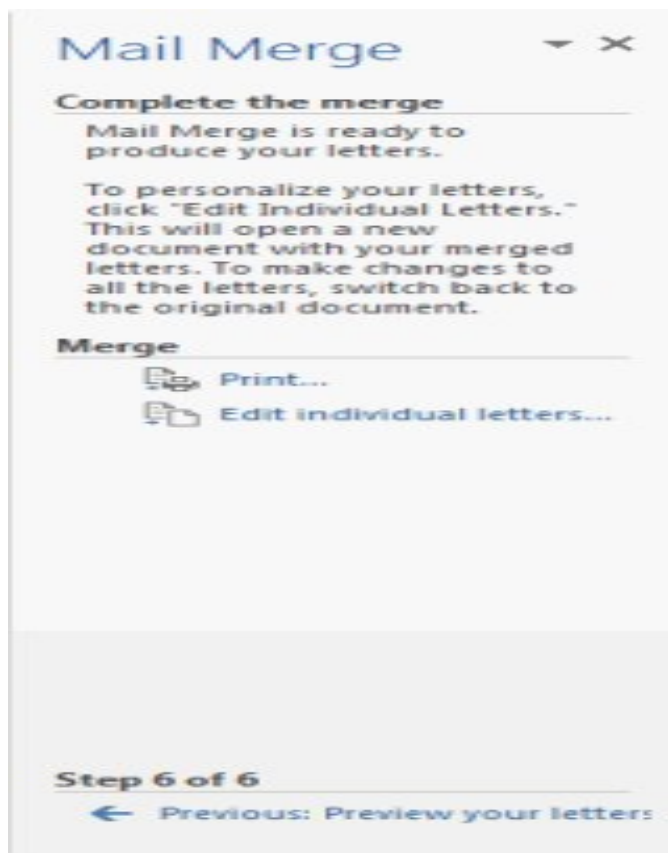
9. Note that the address block and greeting line are surrounded by chevrons (« »). Write a short letter and click **Next: Preview your letters**.



- ☐ Preview your letter and click **Next: Complete the merge**.



□ Click **Print** to print your letters or **Edit individual letters** to further personalize some or all of the letters.



# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 07: Microsoft Excel 1

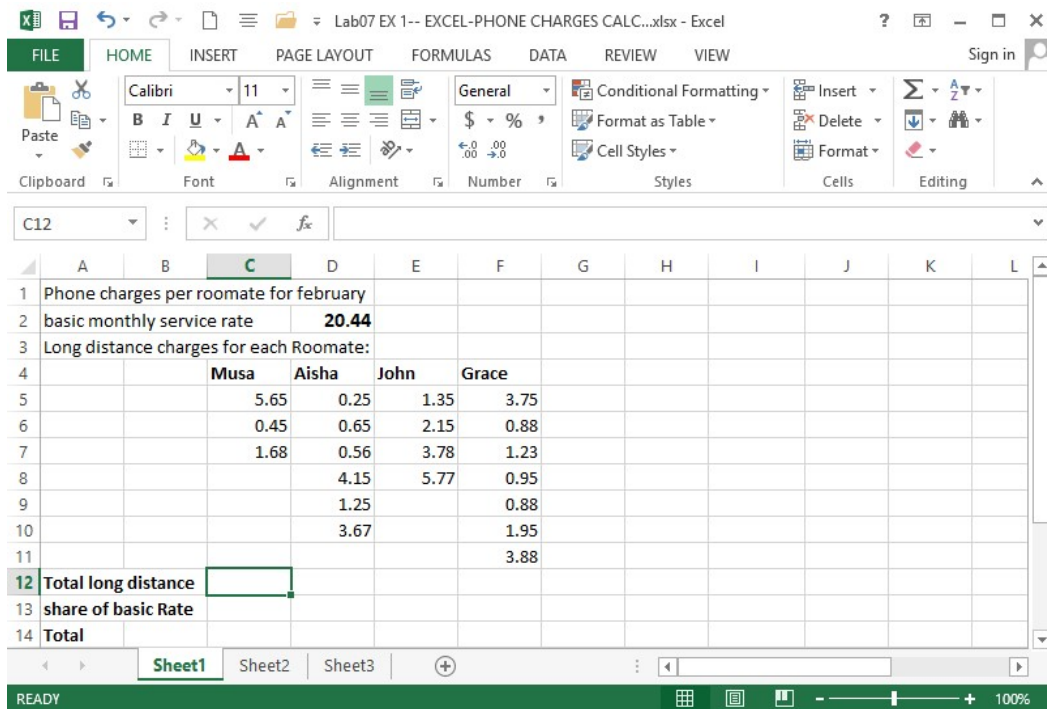
**Objective:** The aim of this laboratory practical is to ensure that students are able to create a worksheet, use functions, differentiate between absolute and relative cell references and format their worksheets

**Requirements:** This project requires Microsoft Excel.

**Lab File:** No file is required for this project.

#### Task 1: Creating a Worksheet

1. Start Microsoft Excel
2. Enter the labels and values shown below:



The screenshot shows a Microsoft Excel window titled "Lab07 EX 1-- EXCEL-PHONE CHARGES CALC...xlsx - Excel". The ribbon includes FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, and VIEW. The HOME ribbon is active, showing options for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The worksheet contains the following data:

	A	B	C	D	E	F	G	H	I	J	K	L
1	Phone charges per roommate for february											
2	basic monthly service rate			20.44								
3	Long distance charges for each Roomate:											
4			Musa	Aisha	John	Grace						
5			5.65	0.25	1.35	3.75						
6			0.45	0.65	2.15	0.88						
7			1.68	0.56	3.78	1.23						
8				4.15	5.77	0.95						
9				1.25		0.88						
10				3.67		1.95						
11						3.88						
12	Total long distance											
13	share of basic Rate											
14	Total											

3. In cell C12, use the AutoSum button to calculate the sum of the cells in column C. Use a similar procedure to calculate the long distance call totals for **Aisha, John, and Grace** in cells D12, E12 and F12.
4. In cell C13, create a formula to calculate **Musa's** share of the **₦20.44** basic monthly service rate by dividing the contents of cell D2 (₦20.44) by 4. Create a similar formula for each roommate in cells D13, E13, and F13.
5. In cell C14, create a formula to calculate Musa's share of the total phone bill by adding the contents of cell C12 to the contents of cell C13. Create a similar formula for each roommate in cells D14, E14, and F14.
6. Change the contents of Cell A1 to Feb Phone.
7. Use the Undo button to change the label in cell A1 back to the original wording.
8. Compare your worksheet to the one shown in the figure on the next page.

	A	B	C	D	E	F	G	H	I	J	K	L
1	Phone charges per roommate for february											
2	basic monthly service rate			20.44								
3	Long distance charges for each Roomate:											
4			Musa	Aisha	John	Grace						
5			5.65	0.25	1.35	3.75						
6			0.45	0.65	2.15	0.88						
7			1.68	0.56	3.78	1.23						
8				4.15	5.77	0.95						
9				1.25		0.88						
10				3.67		1.95						
11						3.88						
12	Total long distance		7.78	10.53	13.05	13.52						
13	share of basic Rate		5.11	5.11	5.11	5.11						
14	Total		12.89	15.64	18.16	18.63						

9. Save your worksheet in your project folder using the file name **YourRegNo-cosc101-Lab07-EX 1**, where **YourRegNo** is your University Reg. Number
10. Copy the file to your flash and submit to your instructor.

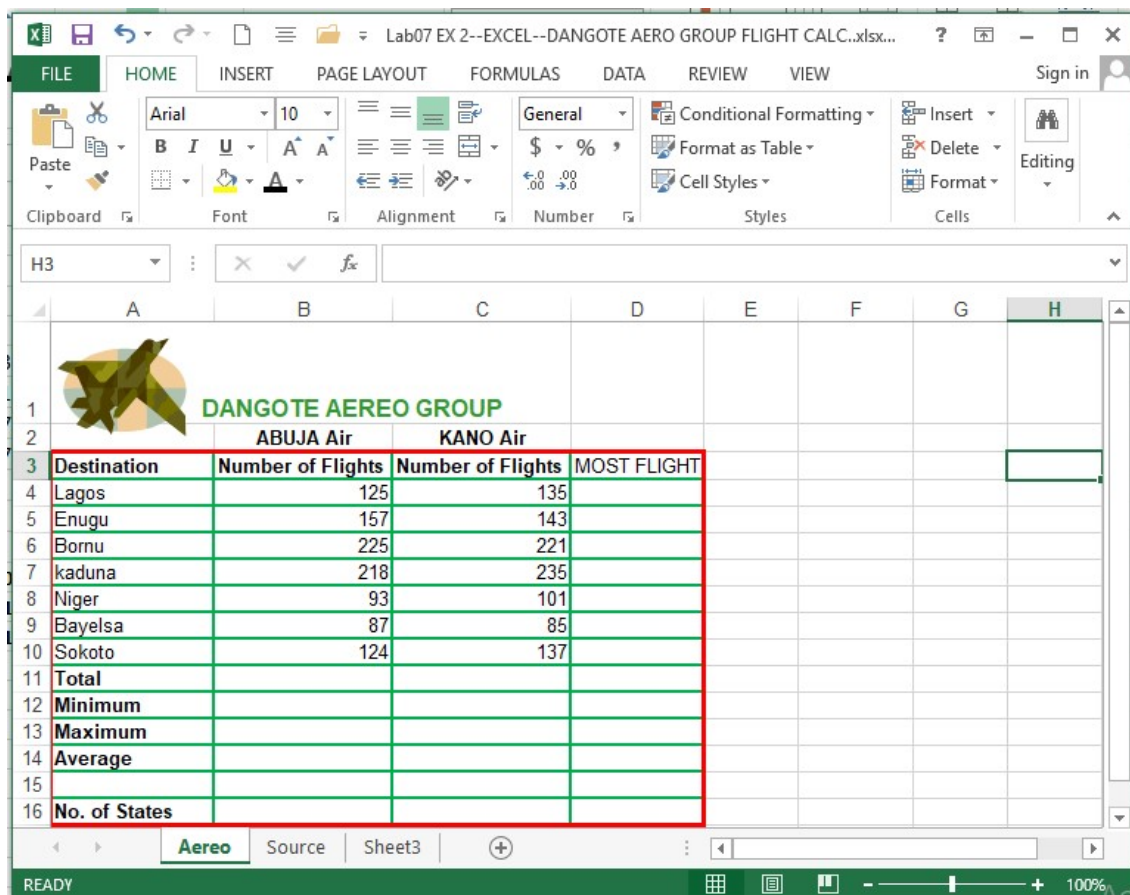
## Task2: USING FUNCTIONS

In this project, you'll apply what you've learned about AutoSum plus the MAX, MIN, AVERAGE, and IF functions to complete a Microsoft Excel worksheet.

**Requirements:** This project requires Microsoft Excel.

**Lab File:** Lab7EX-2.xlsx

1. Copy the file **Lab7EX-2.xlsx** from **Excel Lab Files** folder on the desktop to your Project folder. The file should look like the figure below;

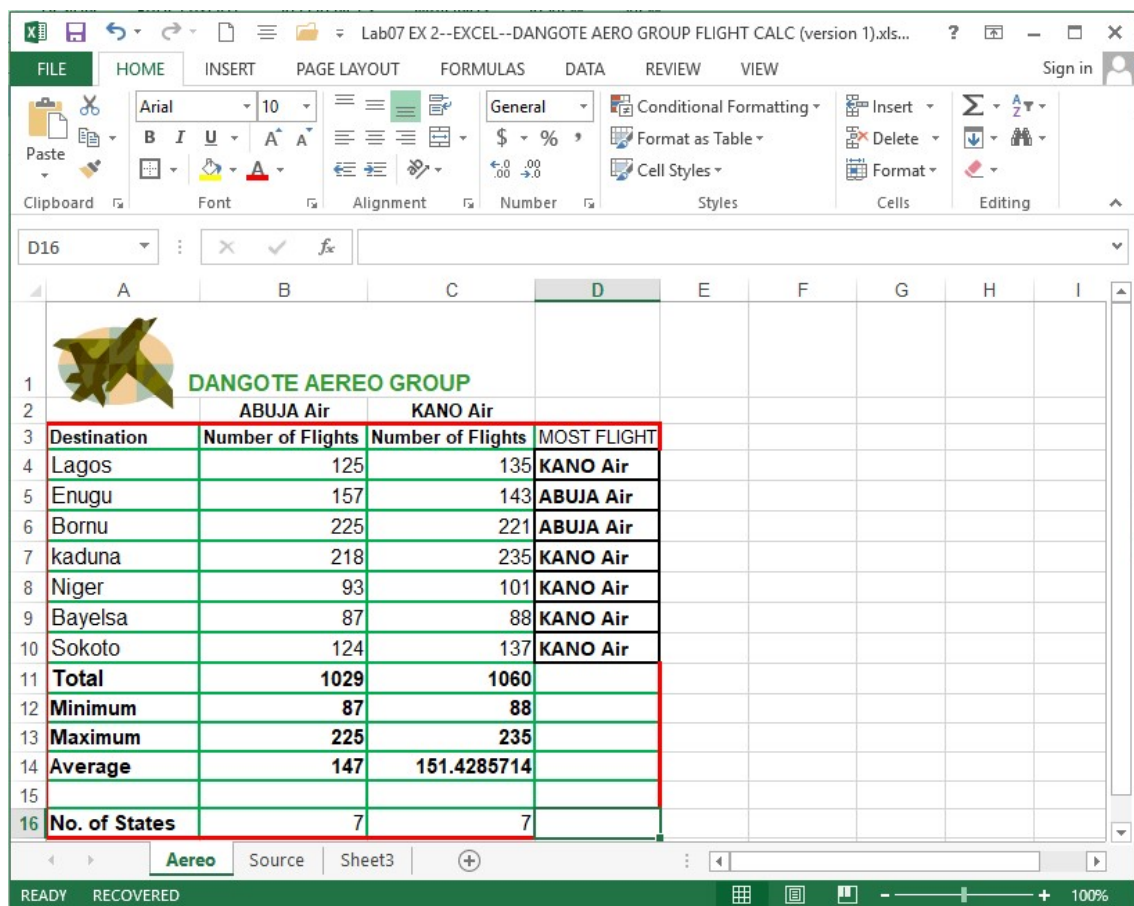


	ABUJA Air	KANO Air	
Destination	Number of Flights	Number of Flights	MOST FLIGHT
Lagos	125	135	
Enugu	157	143	
Bornu	225	221	
kaduna	218	235	
Niger	93	101	
Bayelsa	87	85	
Sokoto	124	137	
Total			
Minimum			
Maximum			
Average			
No. of States			



2. Start Microsoft Excel
3. Open the file **Lab7EX-2.xlsx** from your Project Folder.
4. Click cell **B11** and Use the AutoSum button in Home Tab, Editing group to display the total number of flights, and similarly in **C11**.
5. In cell B12, Type the formula **=MIN(B4:B10)** function to display the lowest number of ABUJA Air flights from the list that begins in cell B4 and ends in cell B10. Enter a similar function in cell C12 for KANO Air flights.
6. In cell B13, Type the formula **=MAX(B4:B10)** function to display the highest number of ABUJA Air flights from the list that begins in cell B4 and ends in cell B10. Enter a similar function in cell C13 for KANO Air flights.
7. In cell B14, Type the formula **=AVERAGE (B4:B10)** function to display the average number of ABUJA Air flights from the list that begins in cell B4 and ends in cell B10. Enter a similar function in cell C14 for KANO Air flights.
8. In cell D3, enter the label Most Flights and adjust the column width so the label fits in a single cell.
9. In cell D4, Type the formula **=IF (B4>C4,"KANO AIR","ABUJA AIR")**  
Logical button in the Function Library group on the Formulas tab to create an **IF function** that compares the number of flights for ABUJA Air and KANO Air. The **IF** function should display KANO Air in cell D4 if that airline has the most flights for **Lagos** and It should display ABUJA Air in cell D4 if that airline has the most flights. (Hint; Place quotation marks around "KANO Air" and "ABUJA Air" when you create the function, and remember that the Insert Function dialog box provides help and examples.)

10. Use the **Fill option** in the Editing group on the Home tab to copy the IF function from cell D4 down to cells D5 through D10.
11. In cell B16, Type the formula **=Count(B4:B10)** Count function to display the number of destination States for ABUJA Air flights from the list that begins in cell B4 and ends in cell B10. Enter a similar function in cell C16 for KANO Air flights.
12. Enter your name in cell **E1**.
13. Compare your worksheet to the one shown in the figure on the next page, but don't save it yet. You have one change to make in Step 14.



	ABUJA Air	KANO Air	MOST FLIGHT
Destination	Number of Flights	Number of Flights	
Lagos	125	135	KANO Air
Enugu	157	143	ABUJA Air
Bornu	225	221	ABUJA Air
kaduna	218	235	KANO Air
Niger	93	101	KANO Air
Bayelsa	87	88	KANO Air
Sokoto	124	137	KANO Air
Total	1029	1060	
Minimum	87	88	
Maximum	225	235	
Average	147	151.4285714	
No. of States	7	7	

14. Change the number in cell **C9** to 85

11. Save your worksheet in your project folder using the file name **YourRegNo-cosc101-Lab07-EX 2**, where **YourRegNo** is your University Reg. Number.

15. Use one of the following options to submit your project on a USB flash drive or as a printout, or as an e-mail attachment, according to your instructor's directions.

### Task3: USING ABSOLUTE AND RELATIVE REFERENCES

In this project, you'll apply what you have learned about absolute and relative references to complete a sales commission worksheet.

Lab File: **Lab7EX-3.xlsx**

1. Copy the file **Lab7EX-3.xlsx** to your project folder on this page.

The screenshot shows an Excel spreadsheet titled 'Lab07 EX-3-- EXCEL- COMMISSION WKSHT.xlsx'. The worksheet is named 'Sheet1' and contains a table with the following data:

	A	B	C	D	E	F
1	<b>Commission Worksheet</b>					
2	Commission Rate:	0.02				
3						
4	<b>Salesperson</b>	<b>Rufai, Kabir</b>	<b>John, Habiba</b>	<b>Musa, Mohd</b>	<b>James, Rose</b>	
5	<b>Week 1</b>	NGN 14,283.00	NGN 11,020.00	NGN 13,477.00	NGN 12,405.00	
6	<b>Week 2</b>	NGN 17,808.00	NGN 12,381.00	NGN 1,100.00	NGN 12,889.00	
7	<b>Week 3</b>	NGN 12,302.00	NGN 14,830.00	NGN 13,747.00	NGN 14,700.00	
8	<b>Week 4</b>	NGN 13,100.00	NGN 19,787.00	NGN 18,483.00	NGN 15,806.00	
9	<b>Total Sales</b>	NGN 57,493.00	NGN 58,018.00	NGN 46,807.00	NGN 55,800.00	
10	<b>Sales Commission</b>	<b>NGN 1,149.86</b>	<b>NGN 1,160.36</b>	<b>NGN 936.14</b>	<b>NGN 1,116.00</b>	
11	<b>Base Salary</b>	NGN 500.00	NGN 501.00	NGN 502.00	NGN 503.00	
12	<b>Salary Plus Commissio</b>	NGN 1,649.86	NGN 1,661.36	NGN 1,438.14	NGN 1,619.00	
13						
14	<b>NGN = ₦</b>					

2. Start Microsoft excel.

3. Open the file **Lab07 EX-3.xlsx** from your project folder.

4. Notice that cell B2 contains a sales commission rate. Each salesperson receives a

commission equal to his her total sales multiplied by the commission rate. The commission rate changes periodically. The worksheet is set up so that if the sales manager changes the rate in cell B2 all the sale commissions will be recalculated.

5. Create a formula in cell **B10** by typing the formula **=B9\*\$B\$2** and click enter to calculate the sale commission for column B, i.e. multiplying the total sales in cell **B9** by the commission rate in cell **B2**. (Hin: you must use an absolute reference for the commission rate in the formula).
6. Copy the formula from cell B10 to cells C10 through to E10.
7. Check the results of the copied formulas to make sure that they show the correct results. If cell C10 through E10 **contain zeros**, you did not use the correct absolute reference for the formula that you entered in step 5. If necessary, modify the formula in B10 by typing **=B10\*\$B\$2** and click enter, then recopy it to cells C10 through E10
8. Compare your worksheet to the worksheet shown in the figure on the next page, but don't save it until you complete step 9 and 10.

	A	B	C	D	E	F
1	<b>Commission Worksheet</b>					
2	Commission Rate:	0.02				
3						
4	<b>Salesperson</b>	<b>Rufai, Kabir</b>	<b>John, Habiba</b>	<b>Musa, Mohd</b>	<b>James, Rose</b>	
5	<b>Week 1</b>	NGN 14,283.00	NGN 11,020.00	NGN 13,477.00	NGN 12,405.00	
6	<b>Week 2</b>	NGN 17,808.00	NGN 12,381.00	NGN 1,100.00	NGN 12,889.00	
7	<b>Week 3</b>	NGN 12,302.00	NGN 14,830.00	NGN 13,747.00	NGN 14,700.00	
8	<b>Week 4</b>	NGN 13,100.00	NGN 19,787.00	NGN 18,483.00	NGN 15,806.00	
9	<b>Total Sales</b>	NGN 57,493.00	NGN 58,018.00	NGN 46,807.00	NGN 55,800.00	
10	<b>Sales Commission</b>	<b>NGN 1,149.86</b>	<b>NGN 1,160.36</b>	<b>NGN 936.14</b>	<b>NGN 1,116.00</b>	
11	<b>Base Salary</b>	NGN 500.00	NGN 501.00	NGN 502.00	NGN 503.00	
12	<b>Salary Plus Commissio</b>	NGN 1,649.86	NGN 1,661.36	NGN 1,438.14	NGN 1,619.00	
13						
14	<b>NGN = ₦</b>					

9. Change the contents of the cell B2 to 0.03
10. Enter your name in cell B3
11. Save your worksheet in your project folder using the file name **YourRegNo-cosc101-Lab07-EX 3**, where **YourRegNo** is your University Reg. Number.
12. Use one of the following options to submit your project on a USB flash drive, as a printout, as an e-mail attachment, according to your instructor's directions.

### **TAKE HOME EXERCISE**

#### **Task 4: Formatting a Worksheet**

In this exercise, you'll apply what you've learned about Microsoft Excel to complete and format a worksheet.

**Requirements:** This project requires Microsoft Excel.

**Lab File:** Lab07 EX-4.xlsx

1. Copy the file **Lab07 EX-4.xlsx** to your Project Folder on this page.

	A	B	C	D	E	F	G	H	I	J	K	L
1	Income and Expense Summary											
2												
3	Income		Previous	Current	Increase	% Increase						
4		Misc. Inco	1450	2208	758	0.522758621						
5		Sales	53200	72850	19650							
6		Total	54650									
7												
8	Expenses											
9		Salaries	22180	23850	1670							
10		Inventory	18462	24502	6040							
11		Rent	4500	5250	750							
12		Advertising	2240	3810	1570							
13		Misc.	1860	2602	742							
14		Total	49242	60014	10772							
15	Profit		5408									

2. Start Microsoft Excel.
3. Open the file **Lab07 EX-4.xlsx** from your Project Folder.
4. Click the empty block between the "A" and "1" labels in the upper-left corner of the worksheet to select the entire worksheet.
5. Change the font size of the entire worksheet to 12 point.
6. Copy the formula from cell C6 to cells D6 and E6.
7. Copy the formula from cell C15 to cells D15 and E15.
8. Copy the formula from cell F4 to cells F5 through F6, and cells F9 through F15.
9. Insert a new, **empty row** before row 15.
10. Change the color of the text in cell A1 to dark blue.
11. Change the font in cell A1 to Times New Roman, size 14, bold.
12. Merge the contents of cells A1 through F1 so that the title is centered across those columns.
13. In cell A2, enter today's date.
14. Use the Dialog Box Launcher in the Number group to open the Format Cells dialog box. Select a date format that displays dates in the format *Wednesday, March 14, 2010*.
15. Merge the contents of cells A2 through F2 so that the date is centered.
16. Format cells A3 through F3 as **bold** text. Format cells A3 and A16 as **bold** text.
17. Format the numbers in cells C4 through E16 as currency.
18. Format the numbers in cells F4 through F16 as percentages (no decimal places).
19. Right-align the labels in cells C3 through F3.
20. Add both inside and outline borders to two cell ranges: B4 through F5 and B9 through F13.



- 21.** Adjust the width of all columns so that all labels and values fit within the cells.
- 22.** Now, explore what happens when you align some of the worksheet labels at a **90°** angle. Select cells **C3** through **F3**. Click the Orientation button in the Alignment group, and then click **Angle Counterclockwise**.
- 23.** Aligning column headings at a 90° angle is useful for worksheets that have many **narrow** columns. On this worksheet, however, the labels looked better at the normal angle, so use the undo button to the quick access toolbar to undo the 90° angle.
- 24.** Compare your worksheet to the one shown below

Income and Expense Summary					
Thursday, March 21, 2019					
		Previous	Current	Increase	% Increase
<b>Income</b>					
	Misc. Income	NGN 1,450.00	NGN 2,208.00	NGN 758.00	52%
	Sales	NGN 53,200.00	NGN 72,850.00	NGN 19,650.00	37%
	Total	NGN 54,650.00	NGN 75,058.00	NGN 20,408.00	37%
<b>Expenses</b>					
	Salaries	NGN 22,180.00	NGN 23,850.00	NGN 1,670.00	8%
	Inventory	NGN 18,462.00	NGN 24,502.00	NGN 6,040.00	33%
	Rent	NGN 4,500.00	NGN 5,250.00	NGN 750.00	17%
	Advertising	NGN 2,240.00	NGN 3,810.00	NGN 1,570.00	70%
	Misc.	NGN 1,860.00	NGN 2,602.00	NGN 742.00	40%
	Total	NGN 49,242.00	NGN 60,014.00	NGN 10,772.00	22%
<b>Profit</b>		NGN 5,408.00	NGN 15,044.00	NGN 9,636.00	178%

12. Save your worksheet in your project folder using the file name **YourRegNo-cosc101-Lab07-EX.4**, where **YourRegNo** is your University Reg. Number.

- 25.** Use one of the following options to submit your project on a USB flash drive or floppy disk, as a printout, or as an e-mail attachment, according to your instructor's directions.

# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

Ahmadu Bello University, Zaria

#### Laboratory for Week 08: Microsoft Excel 2

**Objective:** The aim of this laboratory practical is to ensure that students are able to prepare their worksheets for final printing and create charts.

**Lab File:** Lab08 EX-5.xlsx

#### Task 5: Finalizing a Worksheet

Copy the file **Lab08 EX-5.xlsx** to Project Folder.

Dodo's 'Parking Store' Collection					
Description	Product Size	Weight	Price	Shipping	
D-Magi Star	994 3"Wx7"H	8	\$10.95	\$5.95	
D-Magi Knor	741 3"Wx7"H	7	\$19.95	\$5.95	
D-Magi Royco	561 3"Wx5"H	4	\$12.95	\$5.95	
D-Maggi Doyin	731 3"Wx7"H	5	\$19.95	\$5.95	
D-Magi Chicken	810 2"Wx4"H	9	\$14.95	\$5.95	
L-Magi Star Etra	731 3"Wx4"H	7	\$15.95	\$5.95	
T-Magi Star Super	735 3"Wx4"H	11	\$12.95	\$5.95	
G-Magi Knor Extra	736 3"Wx4"H	14	\$29.95	\$5.95	
K-Magi Royco Extra	777 3"Wx4"H	7	\$27.95	\$5.95	
G-Magi Doyin Extra	782 3"Wx4"H	11	\$22.95	\$5.95	
G-Magi Chicken Extra	792 3"Wx4"H	18	\$12.95	\$5.95	
K-Magi Knor Super	721 4"Wx2"H	19	\$32.95	\$5.95	
G-Magi Royco Super	824 4"Wx2"H	15	\$34.95	\$5.95	
Ancent Magi Doyin Super	872 4"Wx2"H	16	\$32.95	\$5.95	
Medium Mothercare Cornflake	875 3"Wx3"H	1.5	\$29.95	\$4.95	
Medium Fathercare Cornflake	876 3"Wx3"H	1.5	\$29.95	\$4.95	

Discount Schedule	
QTY	Discount
5-10	10%
11-20	20%
21+	30%

1. Start Microsoft Excel and open the file **Lab08 EX-5.xlsx** from your Project Folder.
2. Notice that when you scroll the worksheet, the title and column headings are no longer visible. To freeze the titles at the top of the screen, click cell **A3**. You've clicked this cell because you want the titles above **row 3** to remain fixed in place when you scroll.



3. Click the **View tab**, click **Freeze Panes** in the **Window group**, and then select **Freeze Panes**. Now scroll the worksheet and make sure that rows **1** and **2** remain in view.
4. Scroll down the worksheet and notice that data for **Miniature collections** is not complete. Select cell **B43** and use the Fill option and then Series option to consecutively number the products. For example, The **Miniature Hammer** should have a product number of **359** and the **Miniature War Horse** should be **381**.
5. All of the miniatures are the same size, weight, price, and shipping cost. Use the Fill command to duplicate the information from cells **C43** through **F43** for all **miniature Collections**
6. Select cell **B2**. Use the Wrap Text button in the alignment group of Home Ribbon to wrap the text.
7. Adjust the width of column **B** so that Product Number fits on two lines.
8. Right-justify the data in columns **B** through **F**, then center the titles of those columns.
9. Sort the data in cells **A3** through **F68** in A to Z order by Description i.e. using Custom sort of Editing Group under Home Ribbon.
10. Check the spelling of the worksheet and correct misspellings as needed using F7 function.
11. Unfreeze the panes so that you can scroll the entire worksheet by reversing task 3 above.
12. Add a right-justified **header** to the worksheet that includes **your name**, **YourRegNo-cosc101-Lab08-EX.5**, where **YourRegNo** is your University Reg. Number and **today's date**. Remember that: Header and Footer are under text group of Insert Ribbon.
13. Add a centered **footer** to the worksheet that includes the **word page** followed by the **page number**. Hint: If you can't see header and footer elements such as Page Number, select the **Design tab**.

14. Switch back to Normal view and check the Print Preview to see how this worksheet is set up to print. Does it print all the **Miniature Collections**? What's printed on the second page?
15. Click on back arrow at the top left hand corner of the page and look at the current print area, **A1: I43**. Part of the sheet is not included. Clear the print area so the entire sheet will be printed.
16. Use the Margins options on the **Page Layout tab** to adjust the Width and Height settings to print the worksheet on a single piece of paper. Print your worksheet.
17. The text on the single-page printout is quite small and let's suppose that you don't want to print the Discount Schedule. On the Page Layout tab, change the width and height to Automatic, and the scale to 100%.
18. Select cells **A1** through **F68** and designate this range as the print area, so that the Discount Schedule is not printed.
19. Use the **Print Titles** button to designate cells **A1** through **F2** as the title to print on every page.
20. Using Sheet Options, designate that you want to print gridlines and headings so that you can see the row numbers and column letters on the printout.
21. Set a page break at **row 33**. **Hint:** Select cell **G33** before you click breaks button.
22. Look at a print preview of your worksheet. It should be similar to the two pages below

Lab08 EX-5-- [Read-Only] - Excel (Product Activation Failed)

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW Team Sign in

Clipboard Font Alignment Number Styles Cells Editing

A41 : Medium Yorgurt

	A	B	C	D	E
1	<b>Dodo's 'Parking Store' Collection</b>				
2	<b>Description</b>	<b>Product Number</b>	<b>Product Number</b>	<b>Product Number</b>	<b>Product Number</b>
33	Medium Lux	878	3"Wx3"H	1.5	\$29.95
34	Medium Mothercare Cornflake	875	3"Wx3"H	1.5	\$29.95
35	Medium Peak Milk	890	3"Wx3"H	1.5	\$29.95
36	Medium Ring-Sweet	892	3"Wx3"H	1.5	\$29.95
37	Medium Super Lux	884	3"Wx3"H	1.5	\$29.95
38	Medium Super Niddo Milk	888	3"Wx3"H	1.5	\$29.95
39	Medium Tissue Paper	893	3"Wx3"H	1.5	\$29.95
40	Medium Tom-Tom Sweet	894	3"Wx3"H	1.5	\$29.95
41	Medium Yorgurt	897	3"Wx3"H	1.5	\$29.95
42	Miniature Painting	357	1"Wx1"H	0.5	\$10.98
43	Miniature Bournvita	356	1"Wx1"H	0.5	\$10.98
44	Miniature Carpet	360	1"Wx1"H	0.5	\$10.98
45	Miniature Cooler	375	1"Wx1"H	0.5	\$10.98

Gargoyle

READY 100%

Lab08 EX-5-- [Read-Only] - Excel (Product Activation Failed)

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW Team Sign in

Clipboard Font Alignment Number Styles Cells Editing

A3 : X ✓ fx Ancient Magi Doyin Super

	A	B	C	D	E
1	<b><i>Dodo's 'Parking Store' Collection</i></b>				
2	<b>Description</b>	<b>Product Number</b>	<b>Product Number</b>	<b>Product Number</b>	<b>Product Number</b>
3	Ancient Magi Doyin Super	872	4"Wx2"H	16	\$32.95
4	D-Maggi Doyin	731	3"Wx7"H	5	\$19.95
5	D-Magi Chicken	810	2"Wx4"H	9	\$14.95
6	D-Magi Knor	741	3"Wx7"H	7	\$19.95
7	D-Magi Royco	561	3"Wx5"H	4	\$12.95
8	D-Magi Star	994	3"Wx7"H	8	\$10.95
9	G-Magi Chicken Extra	792	3"Wx4"H	18	\$12.95
10	G-Magi Doyin Extra	782	3"Wx4"H	11	\$22.95
11	G-Magi Knor Extra	736	3"Wx4"H	14	\$29.95
12	G-Magi Royco Super	824	4"Wx2"H	15	\$34.95
13	K-Magi Knor Super	721	4"Wx2"H	19	\$32.95
14	K-Magi Royco Extra	777	3"Wx4"H	7	\$27.95
15	L-Magi Star Etra	731	3"Wx4"H	7	\$15.95

Gargoyle

READY 100%

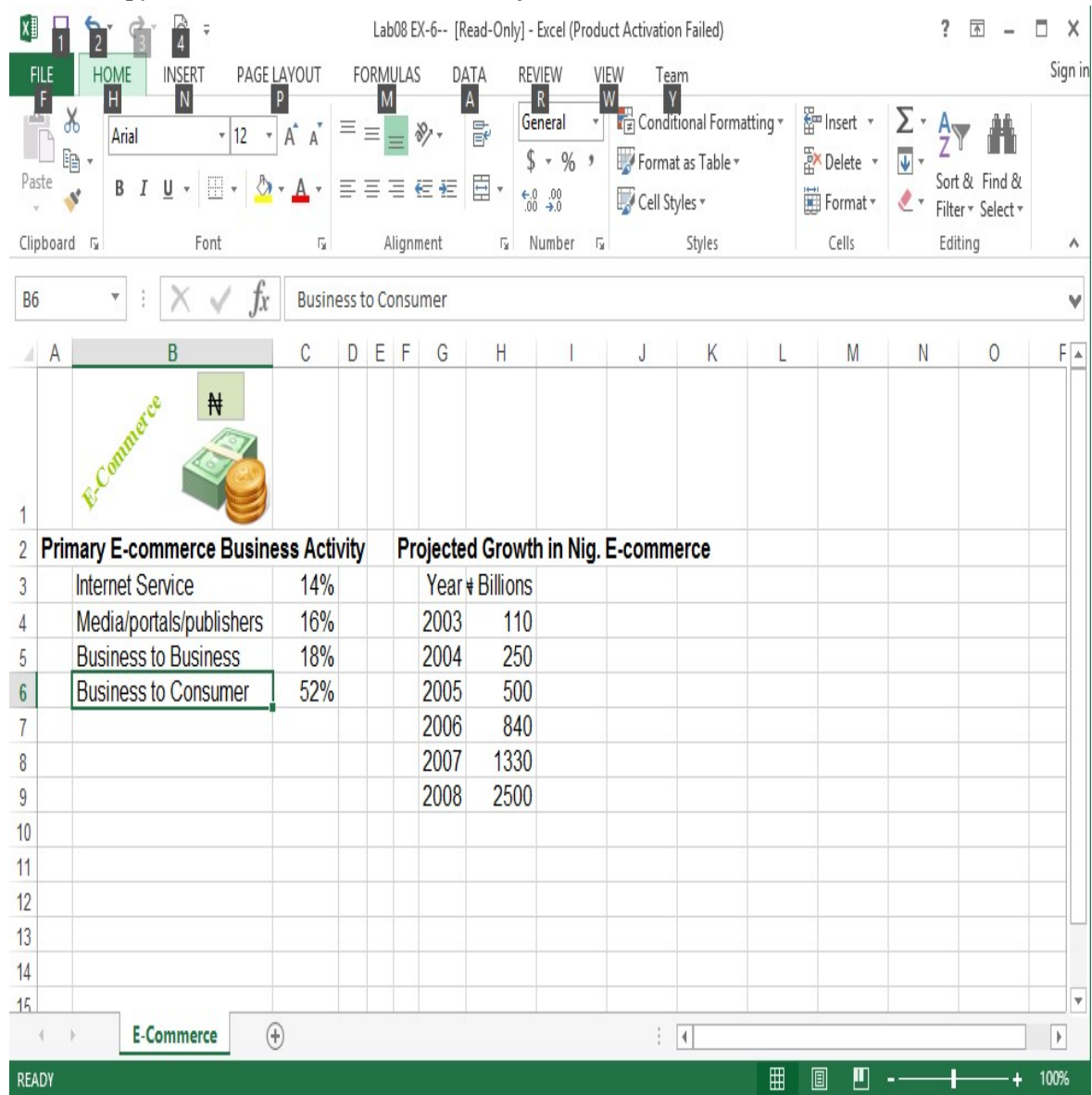
23. Save your worksheet in your project folder using the file name **YourRegNo-cosc101-Lab08-EX.5**, where **YourRegNo** is your University Reg. Number.
24. Submit your project on a USB flash drive, as a printout, as an e-mail attachment, according to your instructor's directions.

## Task 6: Creating Charts

In this project, you'll apply what you've learned about Microsoft Excel to create a column chart and pie chart for e-commerce worksheet.

Lab File: **Lab08 EX-6.xlsx**

1. Copy the file **Lab08 EX-6.xlsx** to Project Folder.



2. Start Microsoft Excel
3. Open the file **Lab08 EX-6.xlsx** from your Project Folder.

4. Select the data in cells **B3** through **C6**. Use the Insert tab to create a **3D pie chart**. Add the chart title, **Which Activities Lead?**, above the chart. Use the Data labels (Data label is under Add Chart Element Drop Down command of Chart Layout Group inside Design Ribbon) button to show percentages on the pie slices. Place the chart on a new sheet and name the sheet **Comparison Chart**.
5. Change the style of the chart to **style 3** in the Chart Styles group on the Design contextual tab.
6. Change the chart background color to Subtle Effect, Accent 2 in the Shape Styles group on the Format contextual tab.
7. Select the data in cells **H4** through **H9**. Use the Insert tab to create a **Clustered Column chart**. Click the Select Data button in the Data group on the Design contextual tab. Click the Edit button for the Horizontal (Category) Axis Labels, then select cells **G4** through **G9**, click the Ok button to close the Axis Labels dialog box, then click the Ok button to close the Select Data Source dialog box. Add the chart title, **Nig. Projections**, above the chart. Add a vertical Y-axis title, **₦ Billions**. Remove the legend from the chart. Place the chart on a new sheet and name the sheet **Growth Chart**.
8. Change the chart type to **Line with markers** in the Type group on the Design contextual tab. Click the Ok button to apply the chart type.
9. Examine the charts to ensure that the spreadsheet data is accurately represented. One easy verification technique is to identify a data trend and see if the trend is shown both in the data and on the chart. A trend in this data is the trend for projected growth to increase from one year to the next. Verify that the line chart corresponds to this trend by making sure the line moves to the right.  
  
Use care when identifying trend; make sure the conclusions you draw are accurate. Be aware of what you can and can't be concluded from data. For example, although this data shows that 52% of e-commerce business activity is from business to consumer, it would be incorrect to assume that 52% monetary transactions on a given day are from consumers to businesses.
10. Copy both charts to E-Commerce tab.
11. Size and Position the pie chart so that the top-left corner of the chart is in cell A10 and the bottom-right corner is in cell E23.

12. Size and position the line chart so that the top-left corner of the chart is in cell G11 and the bottom-right corner is in cell L23.
13. Click a blank cell in the worksheet, and then open the Print Preview. Use Page Setup options to change the page orientation to **Landscape** and fit the worksheet on one page. The worksheet preview should look like the one shown in the figure below.



14. Save your worksheet in your project folder using the file name **YourRegNo-cosc101-Lab08-EX.6**, where **YourRegNo** is your University Reg. Number.
15. Submit your project on a USB flash drive, as a printout, as an e-mail attachment, according to your instructor's directions.

# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 09: PowerPoint 1

**Laboratory Objectives:** The aims of this laboratory is to enable student create high quality power point presentations for viewing using overheads, on-screen or printing with presentation graphics problems.

#### Instructions to Student

You are expected to submit your completed exercises to your Lab instructor before you leave the lab class. Your instructor will advise you how to submit completed exercises.

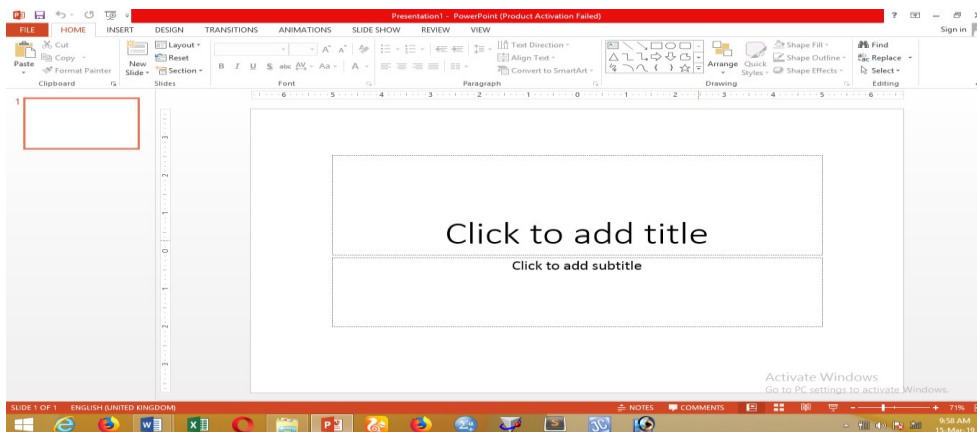
#### Laboratory Exercises:

##### Starting Power Point 2013

1. Start Microsoft 2013

There are variety of ways to start using PowerPoint software. You can click on a shortcut on your desktop or task bar. You can also click on Start>All Programs>Microsoft Office>PowerPoint. In windows 7 and above, you can click on the Start orb and type PowerPoint in the search box in the top left corner and select PowerPoint from the list of choices that appears.

This display a blank **Microsoft PowerPoint** window

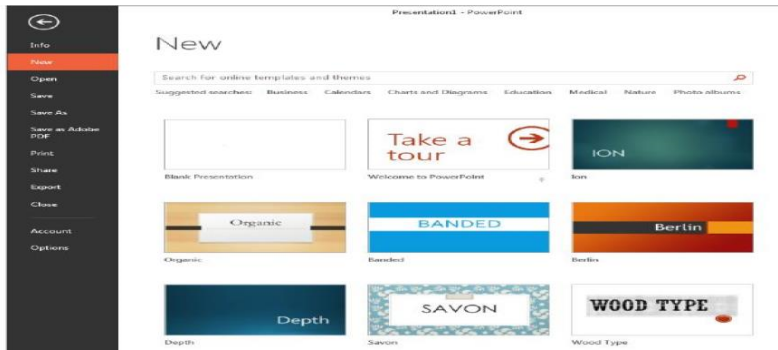




## Creating a New Presentation

2. Create a new presentation by
  - ✓ Clicking on the **File** tab.
  - ✓ Clicking on **New**

This display a window

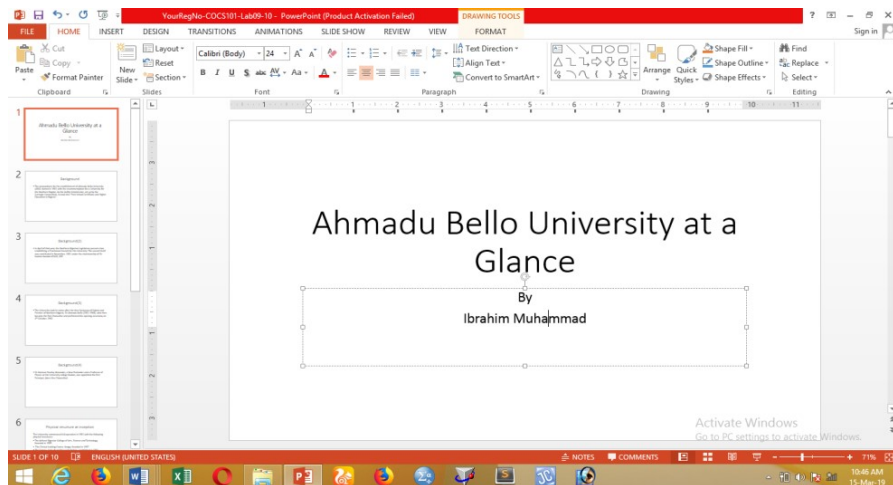


Click on **Blank Presentation** or one of the themes and continue which will display a window as shown previously.

## 3. Saving a Presentation

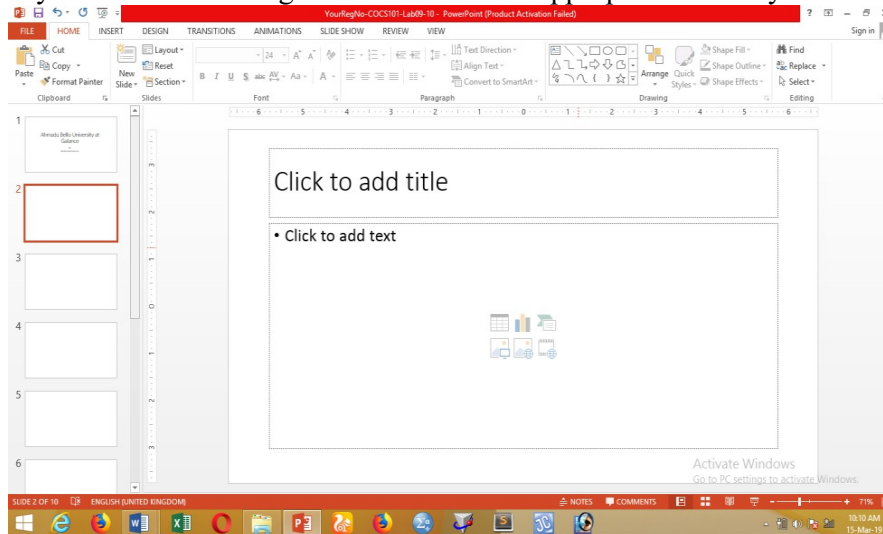
Save the new presentation with the name **YourRegNo-COCS101-Lab09-10**, where **YourRegNo** will be your registration number e.g “*U12MT1212-COCS101-Lab09-10*” in your Personal folder at **My Documents** folder. **Save the presentation** in the default format **PowerPoint Presentation**.

4. Click into the predefined text areas (placeholders). Type the text “*Ahmadu Bello University Zaria at a Glance*” in the Click to add title area. Similarly, you can insert your name in the Click to add subtitle placeholder



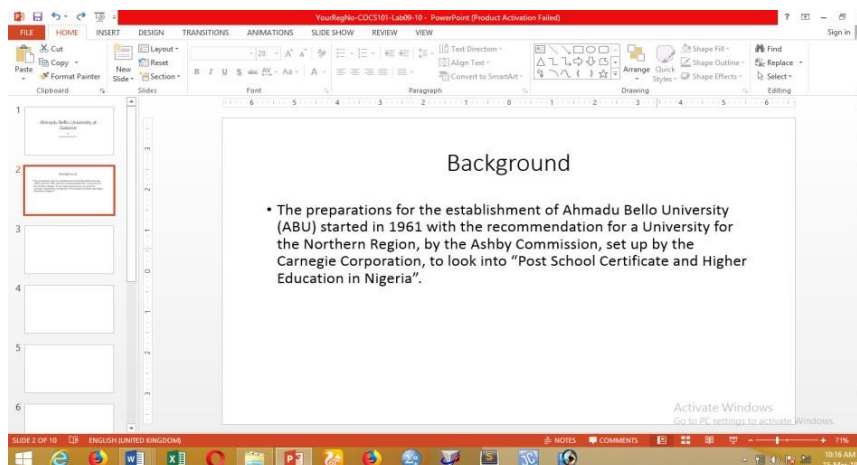
## Adding New Slide to the Presentation

5. Add nine more slides to your presentation using the mouse for the first four, and keyboard the remaining five slides. Choose appropriate slide layouts for each slide.



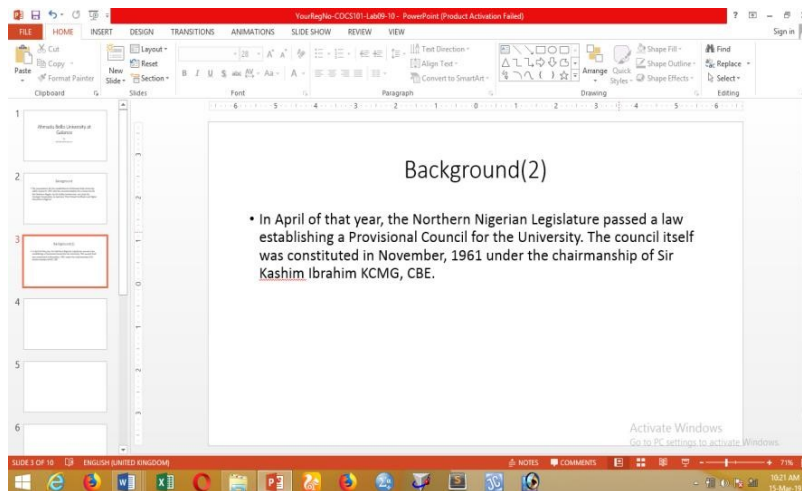
## Working with Content

6. On the slide #two, type “Background” in the slide title placeholder.
7. Copy and paste text1 from file xxx.doc contained in the folder yyy at the desktop, into the placeholder for content



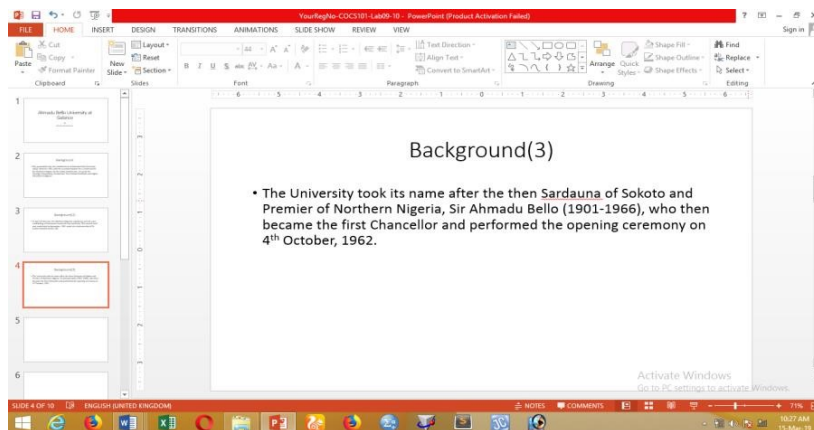
## Working with Content (2)

8. Similarly, on slide #three, type “Background (2)” in the slide title placeholder.
9. Copy and paste text2 from the same file xxx.doc into the content placeholder.



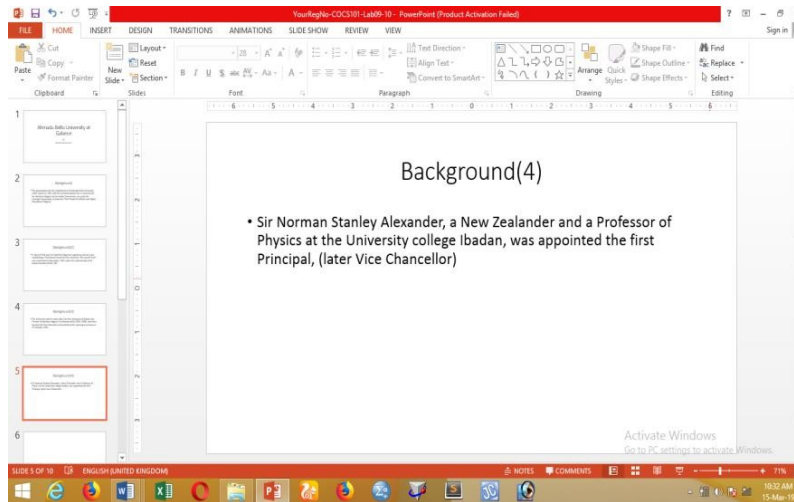
### Working with Content (3)

10. On slide #four, type “Background(3)” in the title placeholder
11. Copy and paste text3 in the content placeholder from same file.



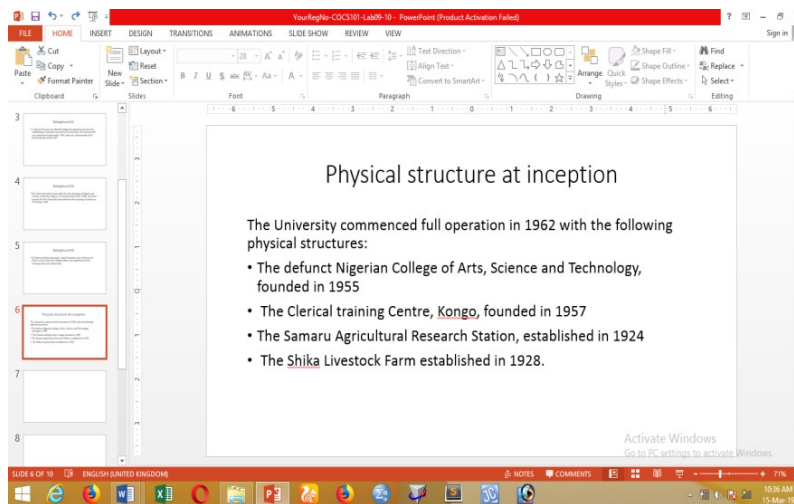
### Working with Content (4)

12. On slide #five, type “Background(4)” in the title placeholder
13. Copy and paste text4 in the content placeholder from same file.



### Working with Content (5)

14. On slide #six, type the text “Physical structure at inception” in the slide title place holder
15. Type also the text5 exactly as it is. (Do not copy and paste as in the previous slides)

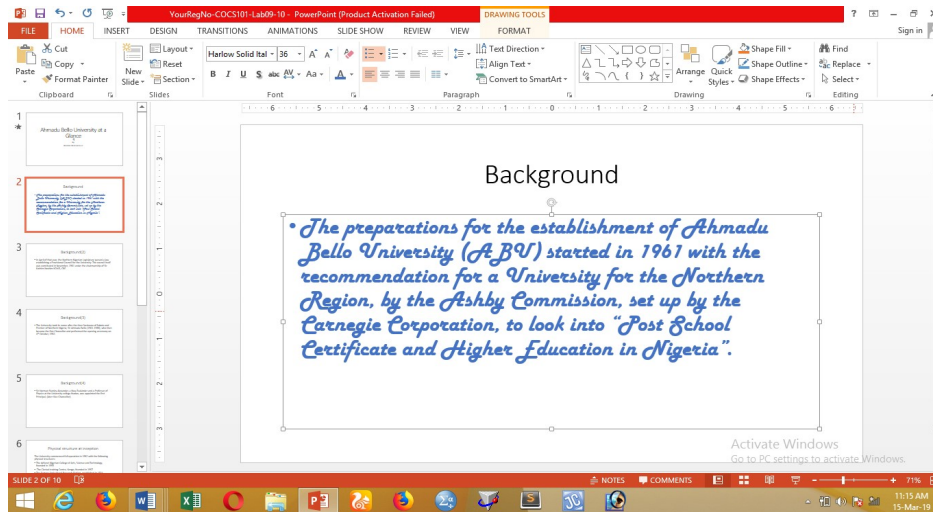


### Working with content (6)

16. Insert the Audio clip title “yori yori” in slide #one. The clip is in the folder yyy. Format the audio clip such that it plays across all the slides automatically.

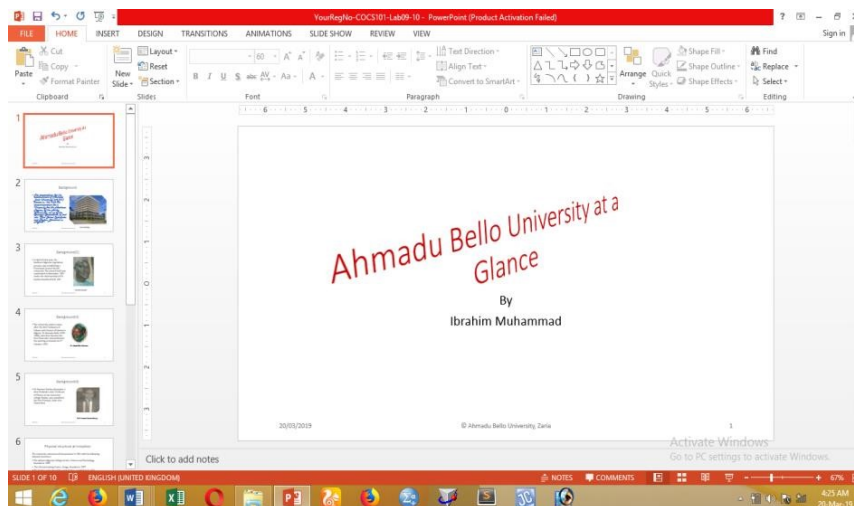
### Formatting Text

17. Select the text in the content placeholder of the slide #two
18. Change the font typeface to Harlow solid italic
19. The font size to 36 points
20. The font color to dark blue



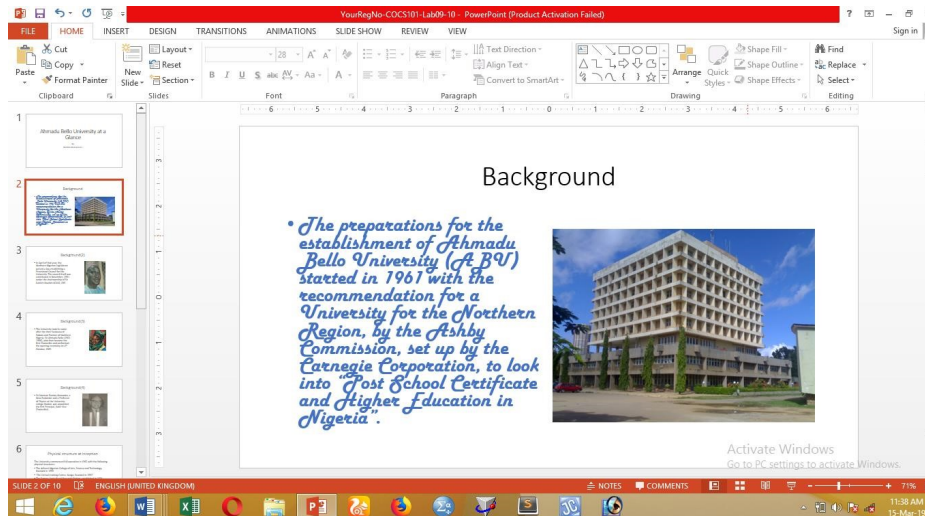
## Formatting Text (2)

21. Select the text in the title slide (slide #one) i.e the title of the presentation.
22. Change the text to wordArt
23. Format the wordArt further to look like the one on the image



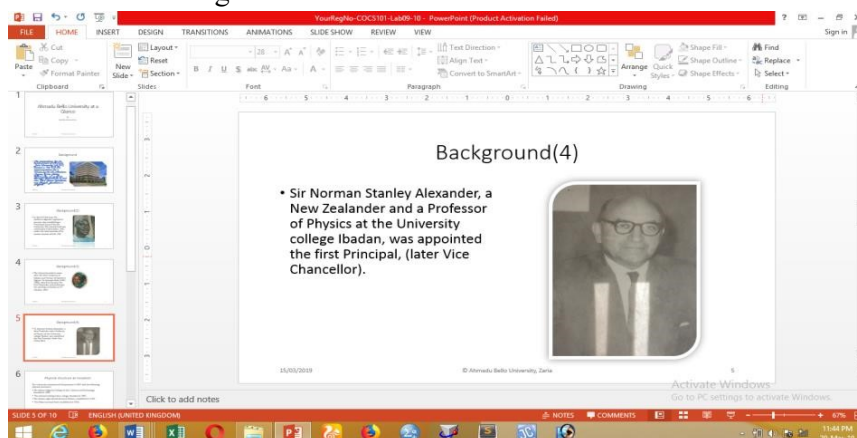
## Graphics

24. Change the slide layout of slide #two, #three and #four to two content layout.
25. Insert images of senate Building in the other placeholder of slide #two, Kashim Ibrahim in that of slide #three, Sir Ahmadu Bello in slide #four and Prof Alexander in slide #five from folder yyy at desktop.



## Graphics (2)

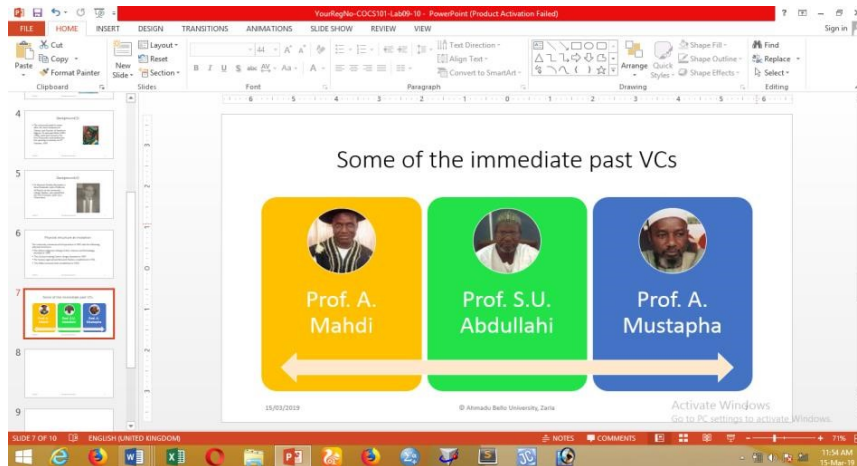
26. Give each image inserted on slide #two, #three, #four and five appropriate frames as shown in the image



## Graphics (3)

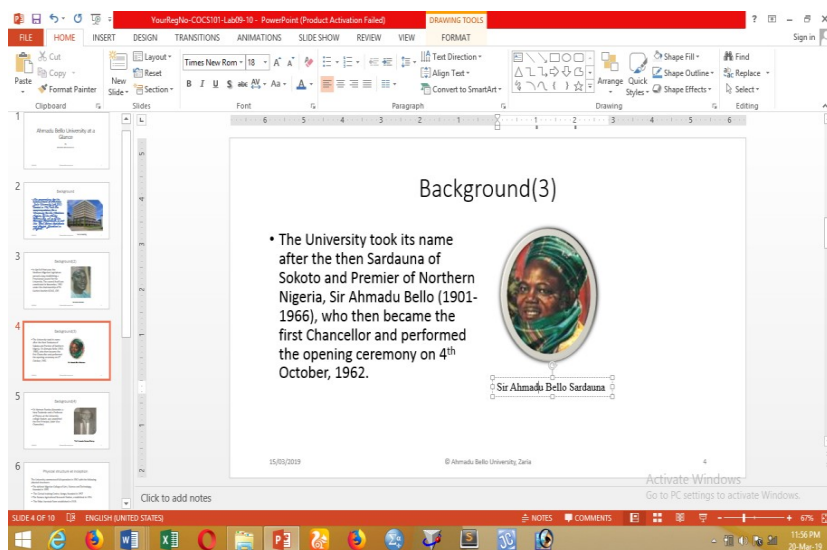
27. On slide #seven, use SmartArt Graphics to list the names of the last two Vice Chancellors and the current Vice Chancellor along with their photograph shown in the image.





### Adding a text box

28. Add text boxes under the images on slides #two, #three, #four and #five.
29. In each text box type the name of the person whose image is displayed as shown.



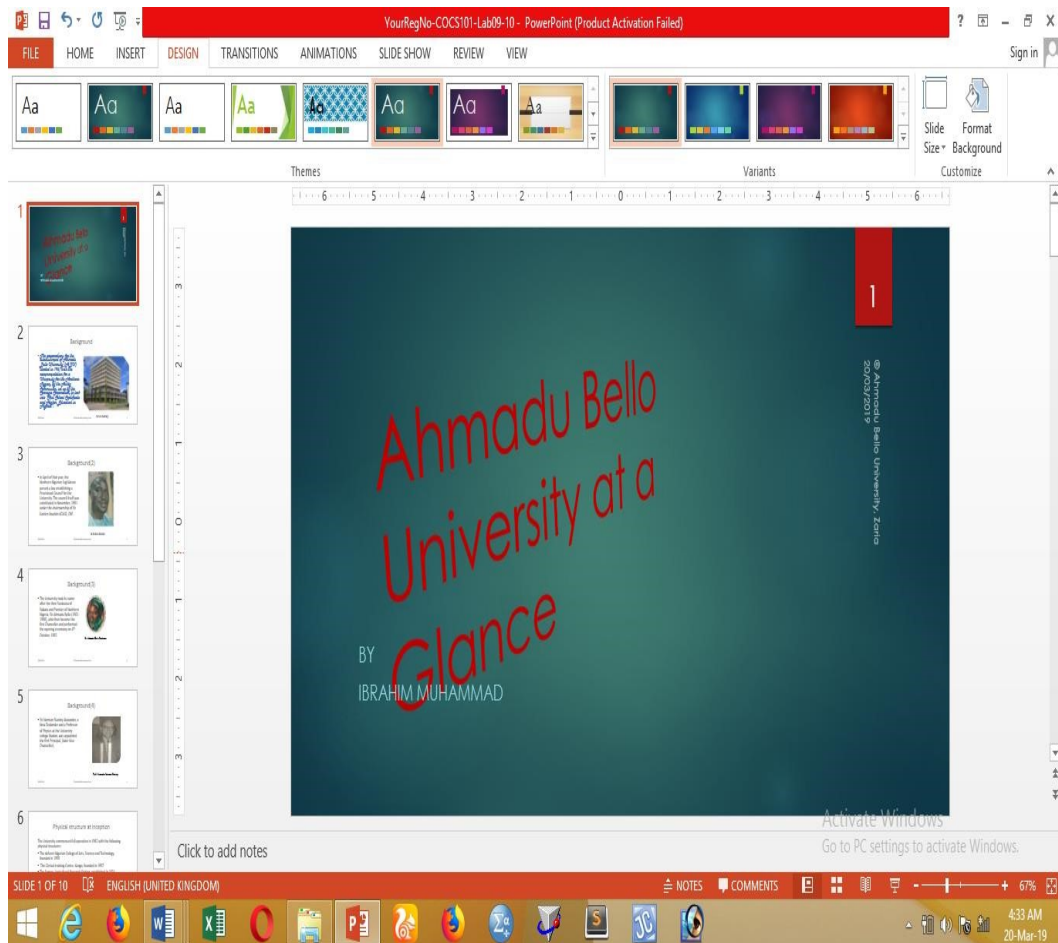
### Headers and Footers

30. Insert a date on all the slides such that it updates automatically.
31. Insert slide numbers on all the slides.
32. Insert the footer “© Ahmadu Bello University, Zaria” on all the slides.

### Applying a Theme

33. Apply **Solstice** theme to the presentation

34. Try any other two different theme from the collection and decide on which best fit your presentation.
35. Apply also different themes to different slides.





# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

**Laboratory for Week 10: Inserting Tables and Charts, Inserting Clip Art, Grouping objects on the slide, Adding Transition and Animation Effects, Running Slide Show**

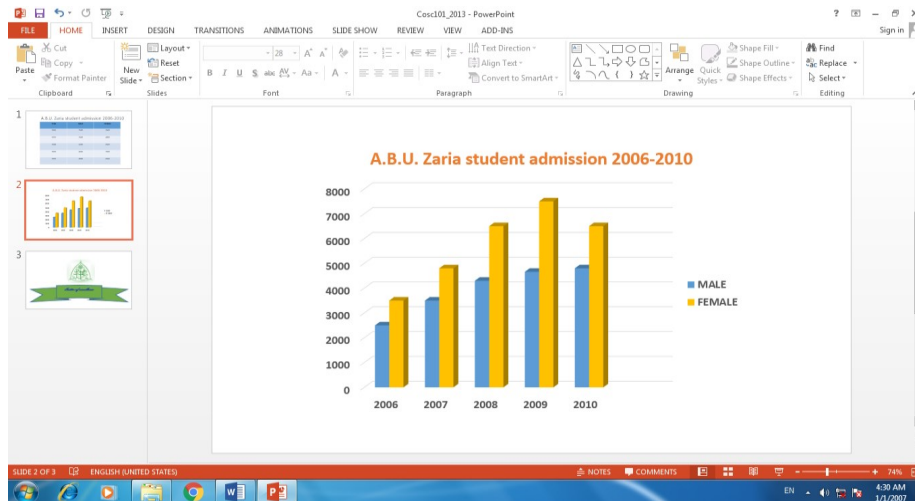
#### Tables

22. On slide #eight type “A.B.U. Zaria student admission 2006-2010” as the slide title.
23. Insert a table with the following hypothetical data representing the number of admitted students in ABU between 2006-2010

YEAR	MALE	FEMALE
2006	2500	3500
2007	3500	4800
2008	4300	6500
2009	4660	7500
2010	4800	6500

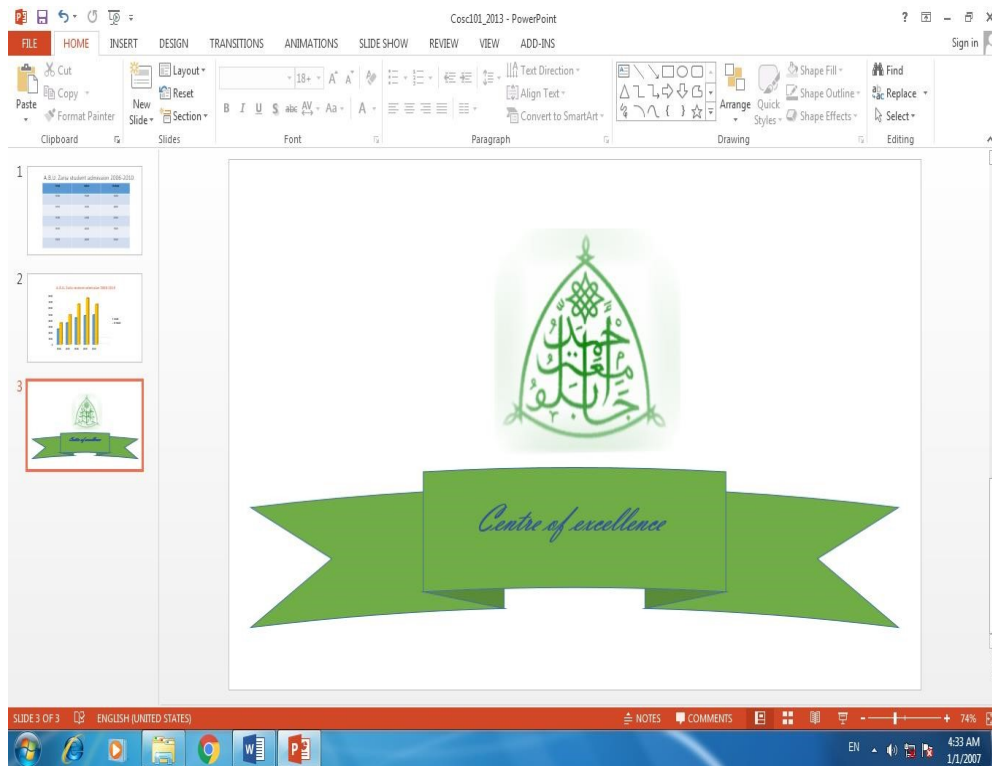
## Charts

24. On slide #nine, insert a column chart representing the data on the table of slide #eight.
25. Format the chart as shown in the image.



## Grouping Clip Art, Picture and Text Box

26. On slide #ten, insert the ABU logo from the yyy folder, the Ribbon from Clip Art gallery and a text box.
27. Type “Centre of excellence” in the text box
28. Format and arrange the three objects as shown in the image and hence group them.



### Slide transition effects

29. Apply transition effect to all the slides, try different effects to different slides.
30. Apply transition time of say 5 seconds to all the slides.

### Slide animation effects

31. Apply custom animation to both text and other objects.
32. Run the slide show.....

# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 11: Internet tools and Technologies

**Introduction:** This section provides the basic concepts of Internet.

**Objective:** The students will be able to use:

1. Different browsers to search for information on the Internet.
2. Different Search techniques.
3. The browser's menu and navigation bars.

#### Lab. Exercise 1:

1. Start your browser and have writing materials ready to write down answers to questions posed in the steps. What is the URL of your Home page?
2. If your browser opens to site other than Google, type [www.google.com](http://www.google.com) in the address bar and press the Enter key to connect to the Google search engine.
3. Enter "Friday Yakubu + correlation analysis of data rate and buffer size on TCP performance using OPNET simulator" in the search text box.
4. Click on "Google Search" button.
5. On the page displayed, identify the link: [IJCA - Correlation Analysis of Data Rate and Router Buffer Size on ...](#) and click on the link
  - a. What is the URL of your Home page?
  - b. What is the title of the page?
  - c. Who are the authors of the journal paper?

- d. Identify the year, article number and article volume number.
- e. Select and copy the Abstract of the journal paper.
6. Open your Microsoft Word application and paste what was copied. Save the file as: Friday's journal.
7. Submit your script for assessment.

### **Lab. Exercise 2:**

1. Start your browser and have writing materials ready to write down answers to questions posed in the steps. What is the URL of your Home page?
2. If your browser opens to site other than Yahoo, type [www.yahoo.com](http://www.yahoo.com) in the address bar and press the Enter key to connect to the search engine.
3. Enter "Friday Yakubu + correlation analysis of data rate and buffer size on TCP performance using OPNET simulator" in the search text box.
4. Click on "Search" button.
5. On the page displayed, identify the link: *Correlation Analysis of Data Rate and Router Buffer Size on ...* and click on the link. What can you say about the information displayed through Google and Yahoo?
6. Add this page to your favorites or Bookmarks. How many sites are listed in your favorites or Bookmarks?
7. Select favorites or Bookmarks on the menu bar and click on organize favorites or Bookmarks menu. On the displayed library dialogue window, right-click on favorites or Bookmarks menu and create a new folder called My sites.
8. Double-click on the favorites or Bookmarks menu; drag the site you bookmarked onto the folder: my sites.
9. Use the Back button to return to the results of your yahoo search, then select any of the links that shows: performance analysis of TCP in a

reliable ..... and click on it. Bookmarked the visited page into the created folder: My sites.

10. Call the Lab. Lecturer for assessment and submit your script.

### **Lab. Exercise 3:**

1. Use any of the browser and search engine to search for information on “Basic search Tips ”.
2. Type: **Basic search Tips** in the search text box and search click on search button.
3. Observe the result of the search.
4. Repeat the search by Typing: **PDF + Basic search Tips.**
5. Write down what you observe on the results of the two search techniques?
6. Search for information on Impact of ETP on education using the following methods
  - a. Type: **Impact of ETP on education** in the search text box and search click on search button.
  - b. Repeat search by Typing: **“ impact of ETP on education”** in the search text box and search click on search button.
  - c. Repeat another search by Typing: **impact + ETP + education** in the search text box and search click on search button.
  - d. Search again by Typing: **PDF + “impact of ETP on education”** in the search text box and search click on search button.
7. Write down your observation on the search techniques.
8. Submit your script for assessment

#### **Lab. Exercise 4:**

1. Start your browser and have writing materials ready to write down answers to questions posed in the steps.
2. Connect to the site [www.ross-simons.com](http://www.ross-simons.com). Click the stop button. Did the entire page load?
3. Can you access the site [www.yahoo.com](http://www.yahoo.com) or [www.google.com](http://www.google.com) from your History list? Explain why or why not.
4. Connect to [www.e-course.com/mgh/reservations.htm](http://www.e-course.com/mgh/reservations.htm). Fill in the newsletter form. Click the submit button to submit the form.
5. Go back to the site [www.ross-simons.com](http://www.ross-simons.com).
6. Use the file menu to access the page Setup dialog box.
  - a. Change the paper orientation to landscape.
  - b. Change the top and bottom margins to “1”.
  - c. Change the left and right margins to “2”
  - d. Click the OK button to save settings.
7. Use the file menu to display a print preview.
8. Make sure that the information fits on two pages, then save on your flash disk.
9. Print out the information that was saved in a flash. 10. Submit a copy of the print out for assessment

# **Ahmadu Bello University, Zaria**

## **Department of Computer Science**

### **COSC101: Introduction to Computing**

---

#### **Laboratory for Week 12: Internet tools and Technologies 2**

##### **Lab. Exercise 1:**

1. Create a yahoo group for discussion. Hint: use the manual as guide, and follow the instructions and steps to create a group.
2. Build membership for the yahoo group created in (1).
3. Send the file: “N Power” as note to the members of the group created in (1).
4. Post a topic: “benefits of having a yahoo group” to the members of the group created in (1) for discussion.

##### **Lab. Exercise 2:**

1. Create a Google group for discussion. Hint: use the manual as guide, and follow the instructions and steps to create a group.
2. Build membership for the yahoo group created in (1).
3. Send the file: “N Power” as note to the members of the group created in (1).
4. Post a topic: “benefits of having a yahoo group” to the members of the group created in (1) for discussion.



# Ahmadu Bello University, Zaria

## Department of Computer Science

### COSC101: Introduction to Computing

---

#### Laboratory for Week 13: Working with E-mail

This section provides the basic concepts of E-mail and yahoo/Google grouping for discussion on the Internet.

**Objective:** The students should understand and able to create an e-mail account and use to send messages with attachment, and to create a group for discussion.

#### Lab. Exercise 1:

1. If you don't have an email address, Create a new email address
  - a. Start your browser
  - b. Type: [www.yahoomail.com](http://www.yahoomail.com) in the address bar
  - c. On the displayed page, click on the button title: Create New Account
  - d. A form page will be display. Fill the form and send it.  
Note: if you did not provide the correct information, the page will be displayed again for correction.
2. If you have an email address, start your browser and access your email account.
3. Create a new message to [emailLab@yahoo.com](mailto:emailLab@yahoo.com).
4. Enter "email\_assignment" in the subject line and in the message area use your own words to write a short message about the course.
5. At the end of the message, type your Reg.No and names as a closing
6. Send the message.

#### Lab. Exercise 2:

1. Access your email account, open the message sent from [emailLab@yahoo.com](mailto:emailLab@yahoo.com) and read it.
2. Add the sent message email address to your address box by right-clicking the From box and selecting add to contacts from the pop-up menu.
3. Compose a reply to the sent message, but don't send off the reply just yet. Look at your Inbox and open a second message. Highlight the most important sentence, click Edit on the menu bar and then click Copy. Switch back to the message you're sending and paste the sentence from the other e-mail message.
4. Create a document from Microsoft Word application and save the file as: email attachment. You are free to type any script.
5. Insert the file email attachment as an attachment.
6. Send and close your email box.

Exercise 3:

1. Use any of the search engines available and find information on “Fuel subsidy in Nigeria”.
2. Summarize your point, not more than one page of a document. Use Microsoft Word to save your summary, and name the file as: Fuel subsidy.
3. Compose a new email message attaching the file: Fuel subsidy, and sent to [emailLab@yahoo.com](mailto:emailLab@yahoo.com)