

COMPUTER APPLICATION

LAB EXERCISE

FOURTH EDITION

NOOR FARAZILA BINTI RADZI
MD. FAUZI BIN ISMAIL
HASHAMUDDIN BIN YA'AKOB

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LAB EXERCISE
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by:

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Politeknik Ungku Omar

2025

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PREFACE

The new edition of this book is different from the previous edition in terms of contents and video. Our aim is to expose students to Microsoft Word, Excel, PowerPoint and Project. It is designed for those who have no prior knowledge or skills in using this application software. It consists of guidelines on how to use this application software.

At the same time, it will develop necessary skills and knowledge to allow them to work on tasks independently using this application software. This book is useful for those who wish to equip themselves with Microsoft Word, Excel, PowerPoint and Project Management skills.

Noor Farazila Binti Radzi

Md. Fauzi Bin Ismail

Hashamuddin Bin Ya'akob

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MICROSOFT WORD: INTRODUCTION



SCAN ME



- Instructions:
1. Scan the QR code
 2. Find the **matching image**
 3. Hold your handphone over the **matching image** and align it properly



ACTIVITY

- i. Prepare a document
- ii. Practice text editing features
- iii. Practice text formatting features
- iv. Perform proofing and protection features

MICROSOFT WORD: LAB EXERCISE 1

You are required to create the following document in a new document.

National Anthem

The national anthem was created in 1957 and the selection of the song was made by the former Prime Minister, Tunku Abdul Rahman Putra Al-Haj Ibni Almarhum Sultan Abdul Hamid Halim Shah. The rhythm of the “Negaraku” was quoted from the rhythm of the state anthem of Perak. The state anthem of Perak had the original idea of the song “Terang Bulan” which is a song favored by Sultan Abdullah, the Sultan of Perak, while he was in exile on the island of Seychelles. “Negaraku” emphasises loyalty and unity for national progress. This song serves to raise patriotism and love for the homeland. The idea to create the national anthem arose when the country was then preparing to celebrate its Independence Day. The national anthem should be played during the proclamation of Independence which was set on 31 August 1957.

Thus, in February 1957, an official anthem creation contest was held. However, the four final songs that were shortlisted were rejected by the Special Committee of the National Anthem Selection (JKPLK), led by Tunku Abdul Rahman Putra Al-Haj. Tunku Abdul Rahman Putra Al-Haj instead recommended the state Anthem of Perak as the basis for creating a national anthem of Malaysia. The proposal had been agreed by the other members of JKPLK. The Score for the song “Negaraku” was provided by Alfonso Soliano (leader of the Radio Orchestra of Malaya), D.S.P Croff (Music Director, the Royal Police Band), Captain Lenthall (Music Director, the Malay Military Band, Port Dickson) and A. T Reed (General Director of Radio Malaya). The lyrics of the national anthem, “Negaraku” was prepared by a Special Committee led by Tunku Abdul Rahman Putra Al-Haj with the agreement of the Malay Sultans.

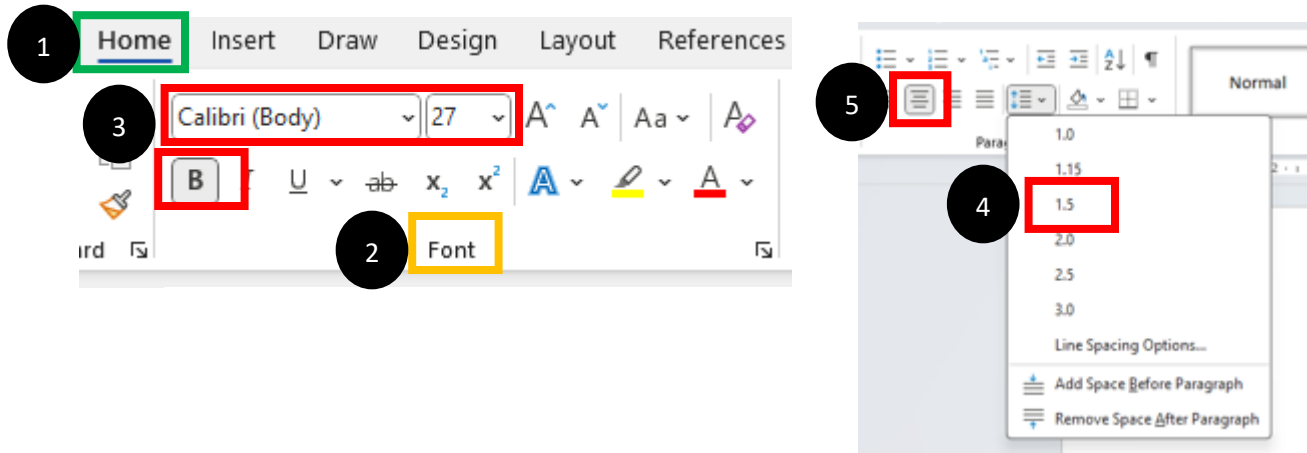
The national anthem, “Negaraku” was heard for the first time after the stroke of midnight on 31 August 1957, at the Selangor Club field. That historical evening witnessed the Union Jack was lowered and replaced with the flag of the Malay Peninsula, accompanied by the national anthem, “Negaraku”. Starting from this moment, the song “Negaraku” continued to be the national anthem.

Source: Department of Information Malaysia (2016)

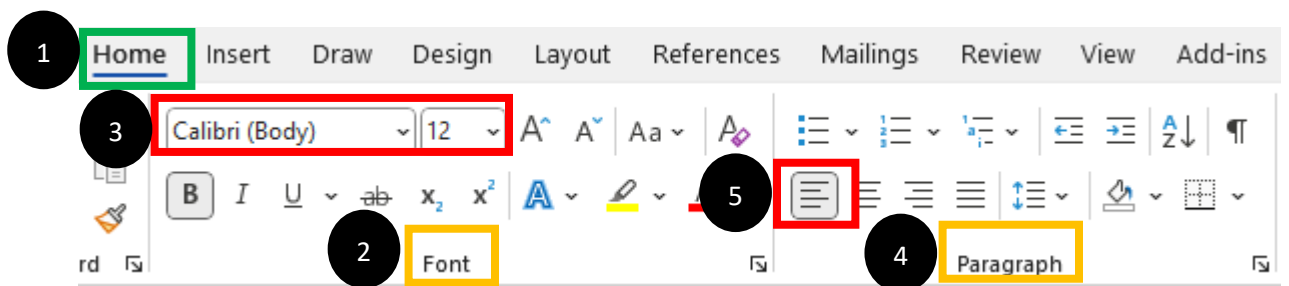
Follow the instructions below:

1. Changing font, font size, character spacing and alignment.

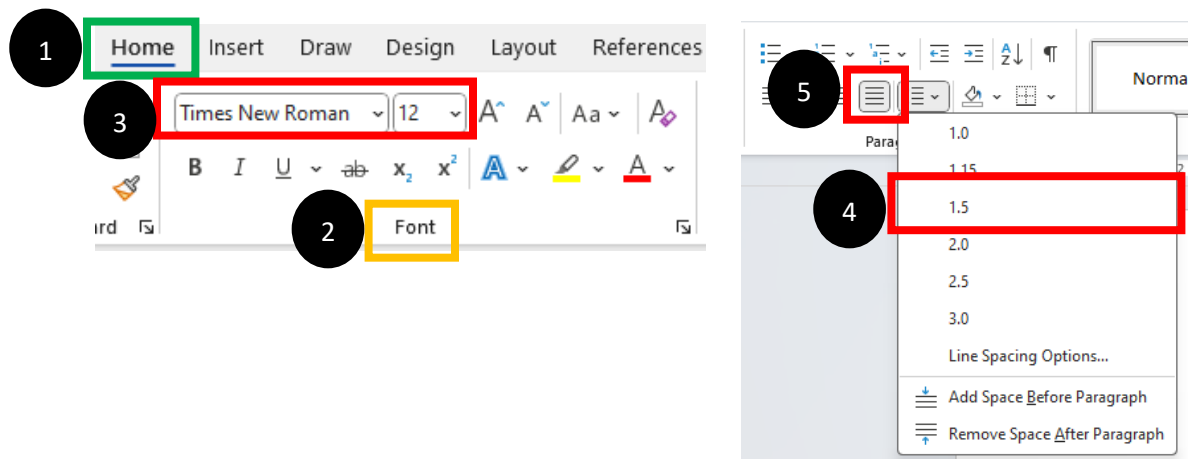
- a. Highlight the title > Home > Font > Font: Arial > Font Size: 27 > Bold
Highlight the title > Home > Paragraph: 1.5 > Center



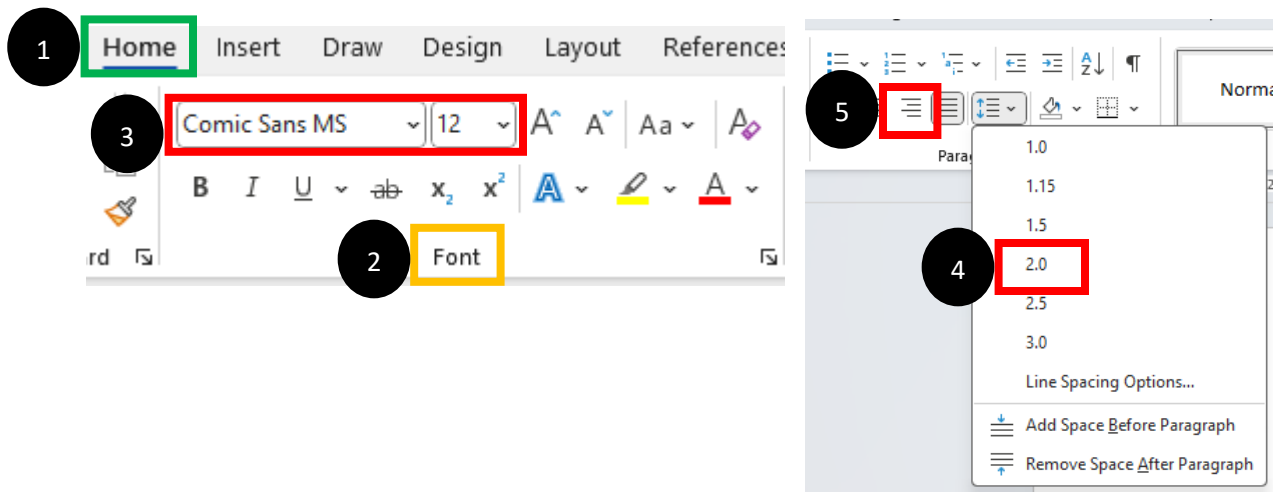
- b. Highlight the first paragraph > Home > Font > Font: Calibri > Font Size: 12 > paragraph > Align left



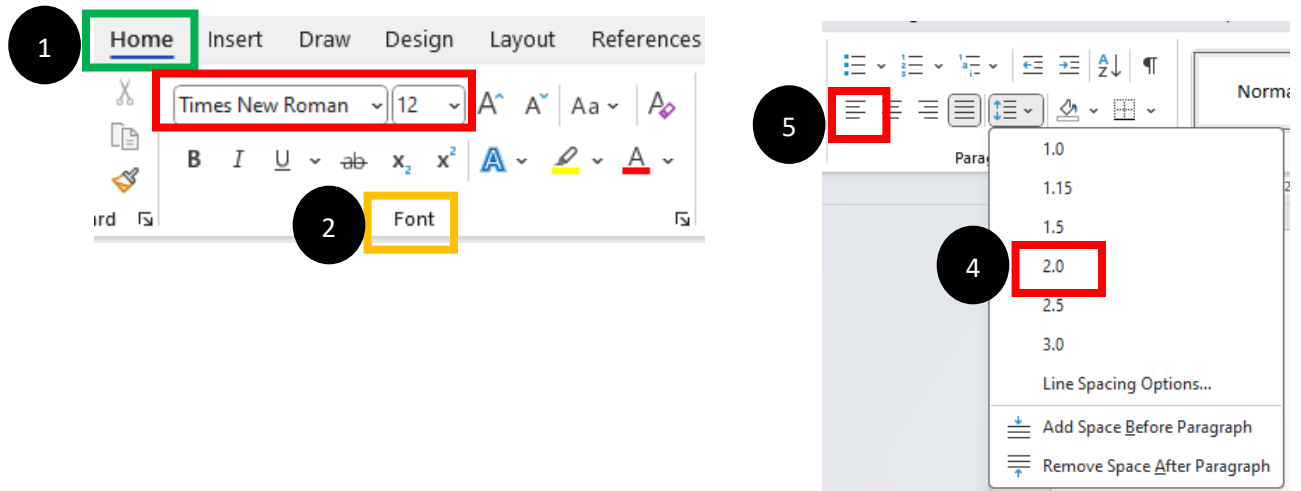
- c. Highlight the second paragraph > Home > Font > Font: Times New Roman > Font Size: 12 > paragraph > Justify
Home > Paragraph: 1.5



- d. Highlight the third paragraph > Home > Font > Font: Comic Sans Ms > Font Size: 12 > paragraph > Align right
Home > Paragraph: 2.0

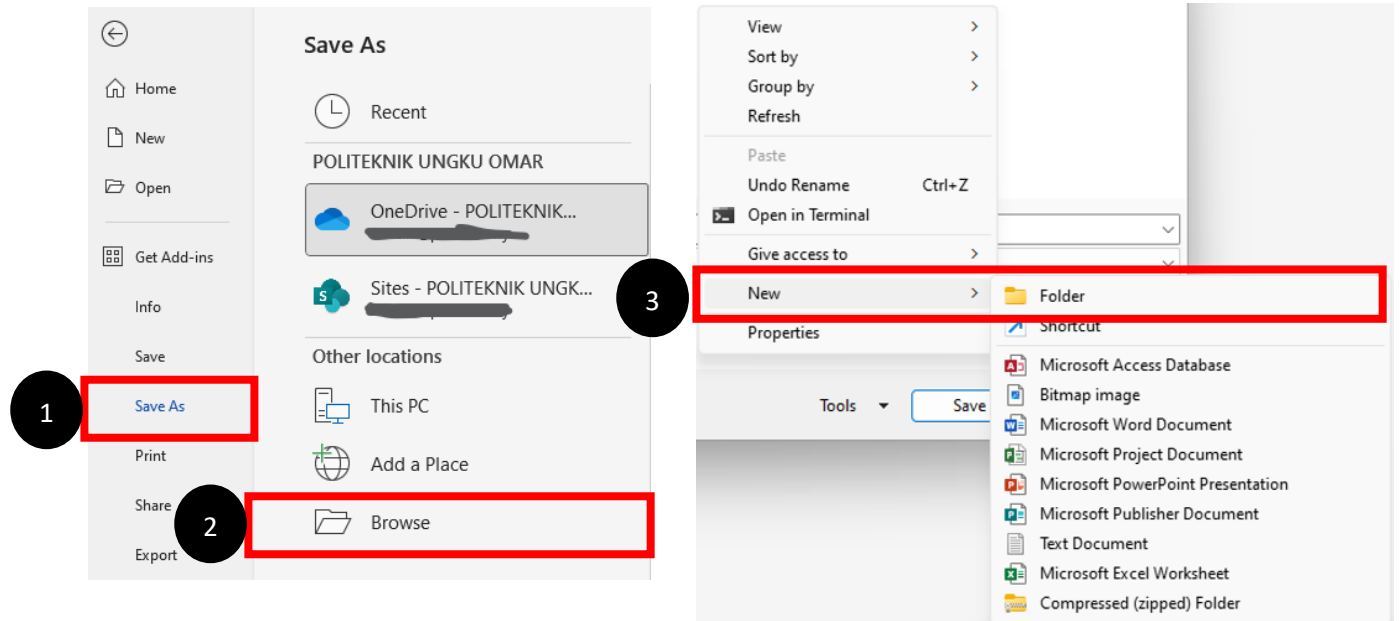


- e. Highlight the “Source: Department of Information Malaysia (2016)” > Home > Font > Font: Times New Roman > Font Size: 12 > paragraph > Align left
Home > Paragraph: 2.0



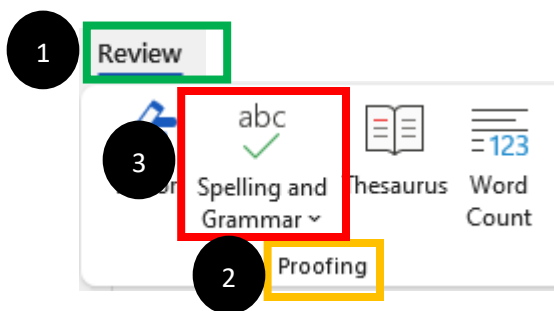
2. Save a document

File > Save as > Browse ...> Right click > New > Folder > Rename as
COMPUTER APPLICATION > Double click on COMPUTER APPLICATION folder
> File Name: *YOUR MATRIC NO WORD PROCESSOR 1*

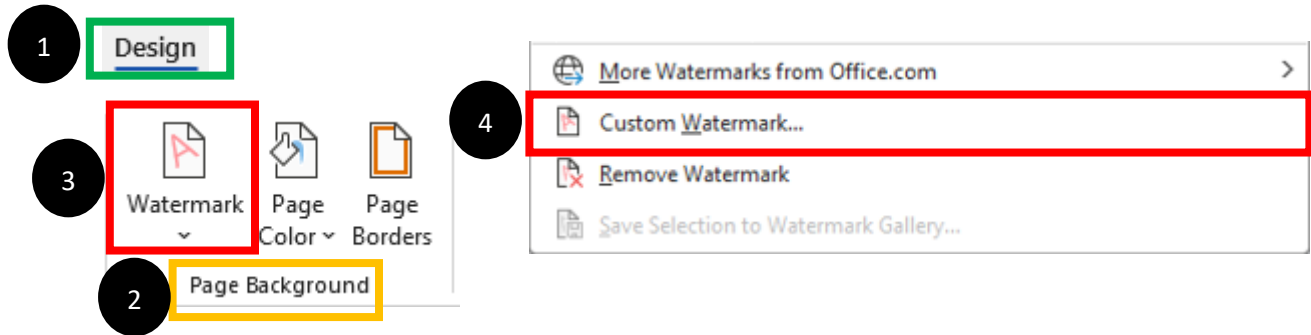


3. Perform AutoCorrect Function:
Review > Proofing > Spelling & Grammar:

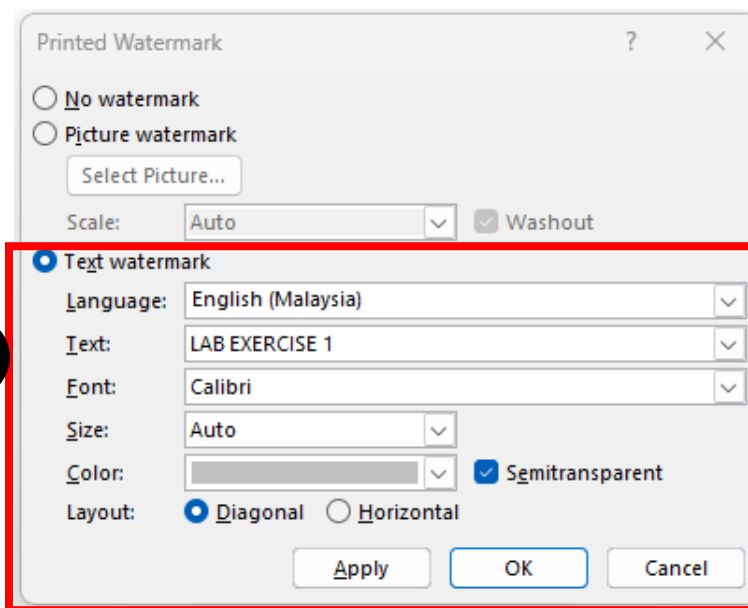
arosse	arose
agree	agreed
favored	favoured



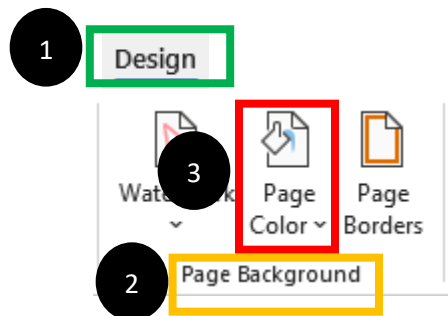
4. Insert watermark
Design > Page Background > Watermark > Custom Watermark >



5

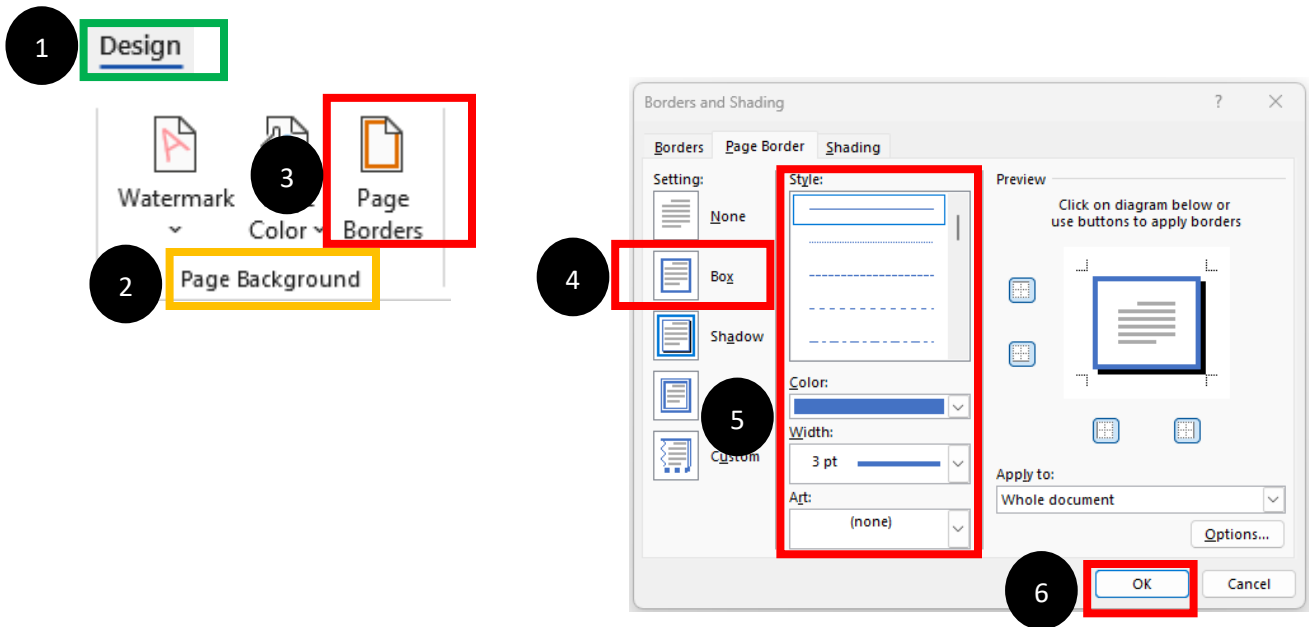


5. Insert page colour
Design > Page Background > Page Color: Blue, Accent 5, Lighter 60%

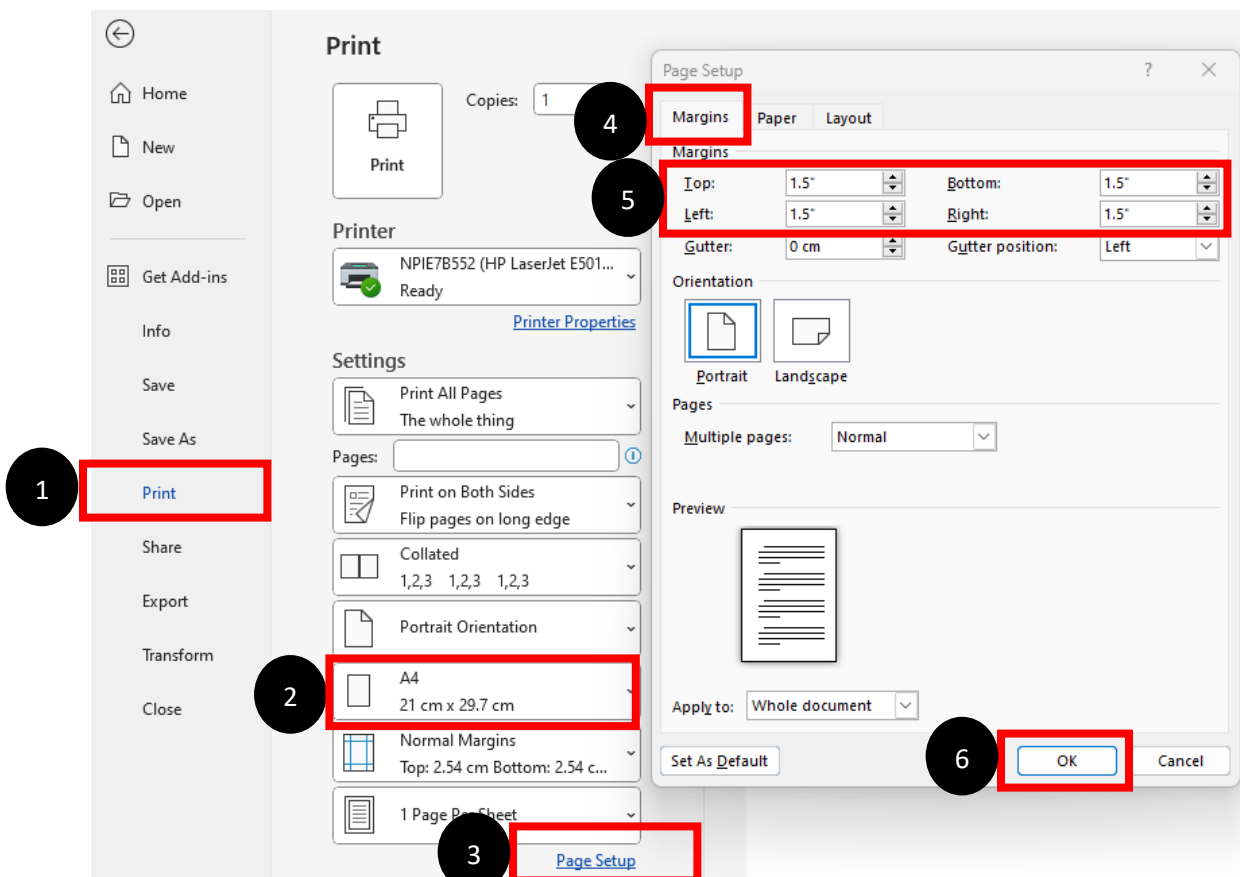




6. Insert page border
Design > Page Background > Page Borders >



7. Previewing and printing
File > Print > Page Setup: Left, right, top, bottom = 1.5" > OK > Settings: A4 size > Return to document



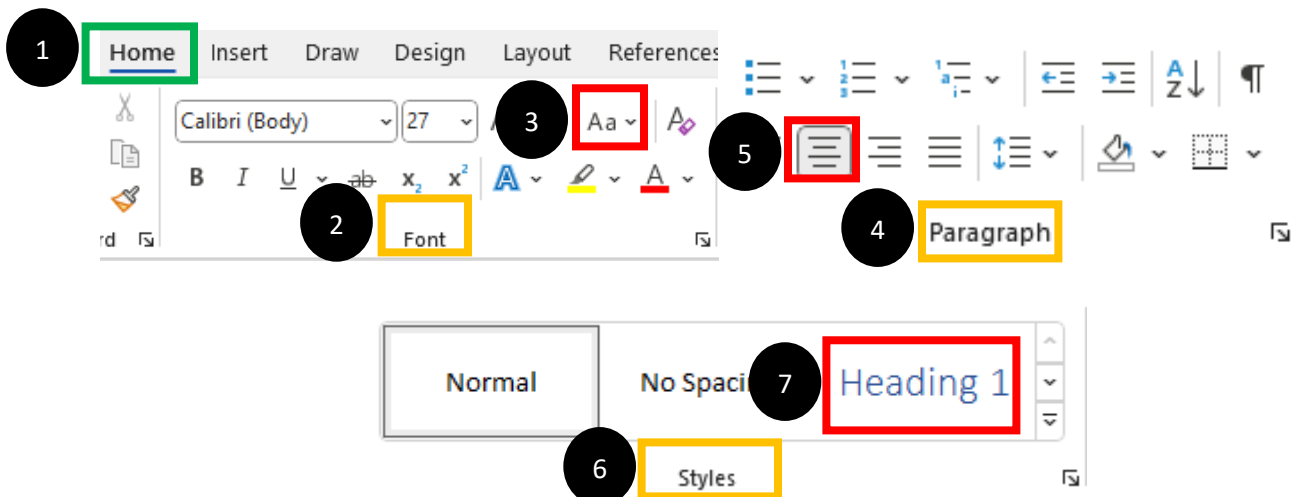
ACTIVITY

- i. Practice text editing features
- ii. Practice text formatting features

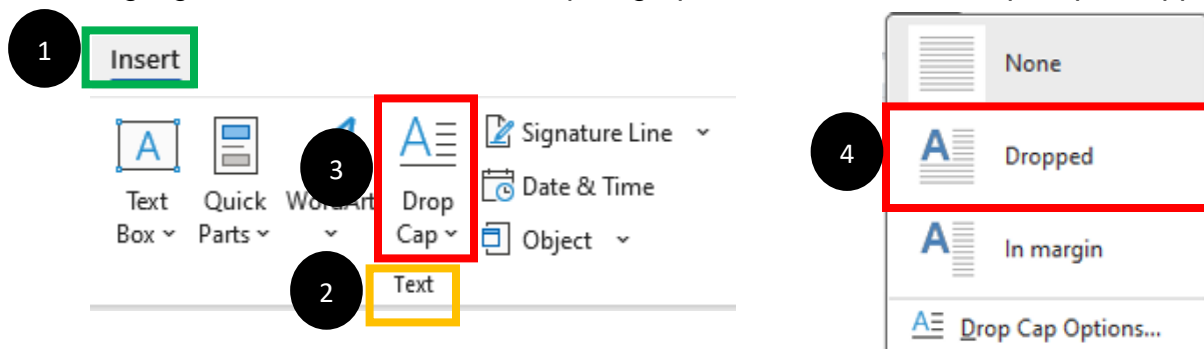
MICROSOFT WORD: LAB EXERCISE 2

Follow the instructions below:

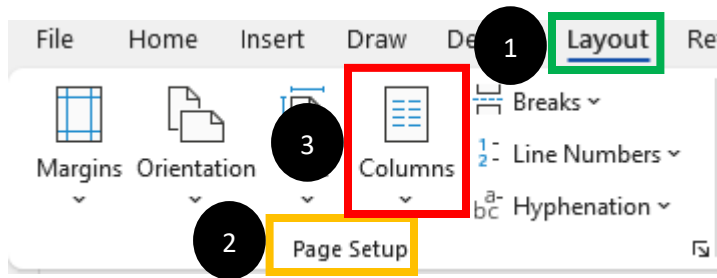
1. Open > YOUR MATRIC NO WORD PROCESSOR 1
2. Save a document
Save as YOUR MATRIC NO WORD PROCESSOR 2
3. Changing font, font size, character spacing and alignment.
 - a. Highlight the title > Home > Font > Change Case: UPPERCASE
 - b. Highlight the title > Home > Paragraph > Center
 - c. Highlight the title > Home > Styles: Heading 1



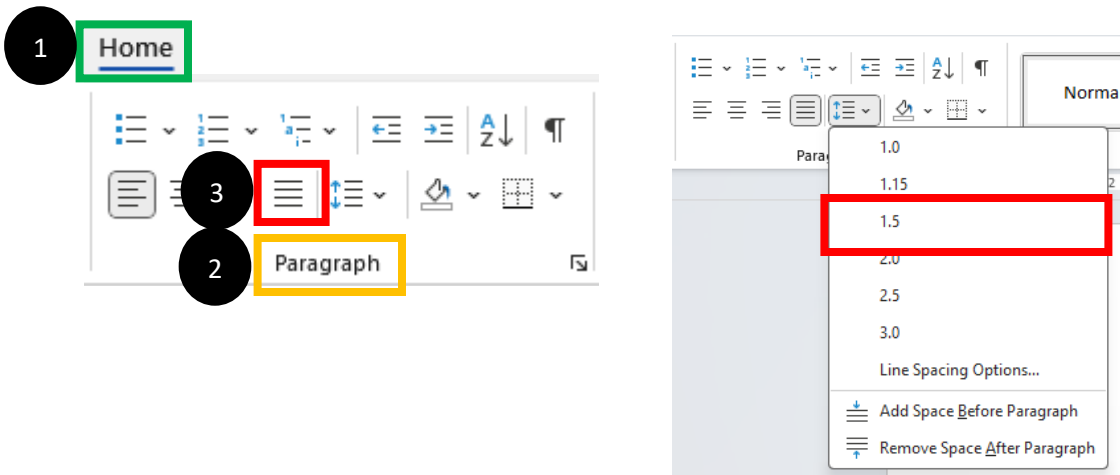
4. Insert Drop Cap
Highlight the first letter in the first paragraph > Insert > Text > Drop Cap: Dropped



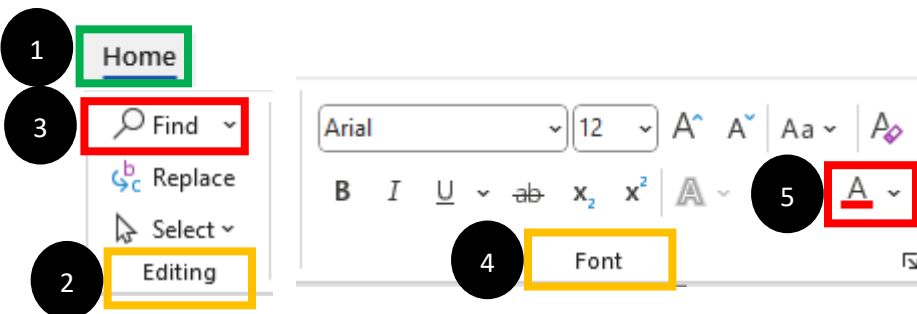
5. Add column
Highlight all the text > Layout > Page Setup> Columns: 2



6. Changing font, font size, character spacing and alignment.
Highlight all the text > Home > Paragraph > Justify
Highlight all the text > Home > Paragraph: 1.5

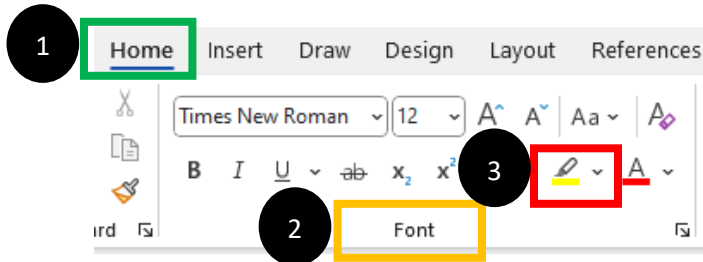


7. Navigating and Searching through a Document
Home > Editing > Find: Navigation: "Negaraku"
Highlight the word "Negaraku" > Font > Font Color: Red





8. Apply text highlight color
Highlight the first paragraph > Font > Text Highlight Color: Red
Highlight the second paragraph > Font > Text Highlight Color: Yellow
Highlight the third *paragraph* > Font > Text Highlight Color: Blue



9. Save a document
File > Save
10. Previewing and printing
File > Print > Page Setup: Left, right, top, bottom =1.5" > OK > Settings: A4 size
> Return to document



ACTIVITY

- i. Modify page by using page layout features
- ii. Perform proofing and protection features

MICROSOFT WORD: LAB EXERCISE 3

Follow the instructions below:

You are required to create the following document in a new document.

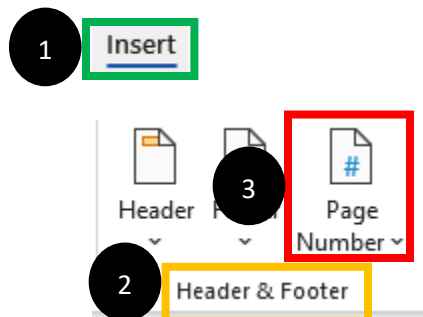
NATIONAL PRINCIPLES (RUKUN NEGARA)

Now therefore, we, the people of Malaysia, pledge to concentrate our energy and efforts to achieve these ambitions based on the following principles:

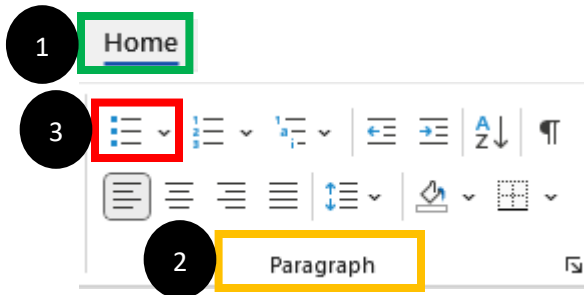
Belief in God
Loyalty to the King and Country
Supremacy of the Constitution
Rules of Law
Courtesy and Morality

Source: Department of Information Malaysia (2016)

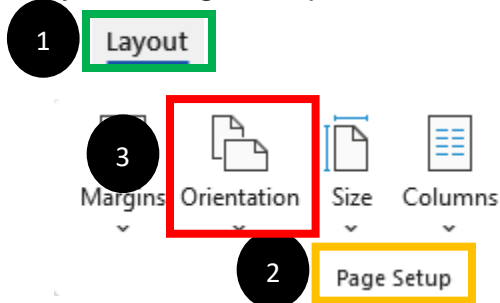
1. Insert headers and footers
Insert > Header & Footer > Header: Integral
Type YOUR NAME AND MATRIC NUMBER at the header
2. Insert page number
Insert > Header & Footer > Page Number: Circle



3. Created bulleted list
Home > Paragraph > Bullets
Insert bullet as follow:
 - Belief in God
 - Loyalty to the King and Country
 - Supremacy of the Constitution
 - Rules of Law
 - Courtesy and Morality



4. Page orientation
Layout > Page Setup > Orientation > Landscape



4. Save a document
File > Save as > Browse ...> Folder: COMPUTER APPLICATION > File Name:
YOUR MATRIC NUMBER WORD PROCESSOR 3

ACTIVITY

- i. Create a new table.

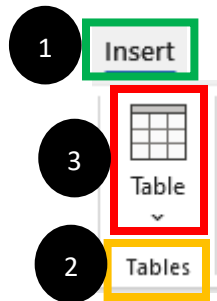
MICROSOFT WORD: LAB EXERCISE 4

Follow the instructions below:

You are required to create the following table in a new document.

NAME	ASSIGNMENT	QUIZ	TEST
ZAEM BIN HARIS	60	80	85
HAFIZ BIN SHAHRUL	75	55	53
ZIKRY BIN ANUAR	80	47	49
HUDA BINTI MOHD	30	88	37

1. Insert table
Insert > Tables: 4 columns and 5 rows



2. Changing font, font size, character spacing and alignment.
Type the text > Font > Arial, 12
Highlight the label for each column > Font: Bold
Highlight ASSIGNMENT, QUIZ, TEST column > Paragraph: Center
Highlight NAME column > Paragraph: Align left
3. Save a document
File > Save as > Browse ...> New Folder: COMPUTER APPLICATION> File Name: YOUR MATRIC NO WORD PROCESSOR 4

ACTIVITY

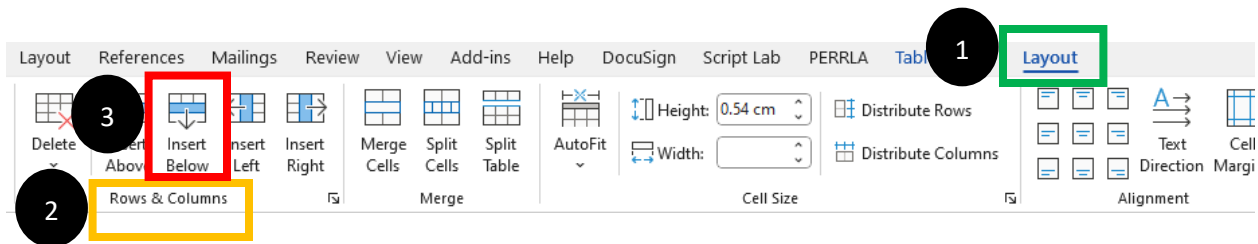
- i. Use table content features

MICROSOFT WORD: LAB EXERCISE 5

Follow the instructions below:

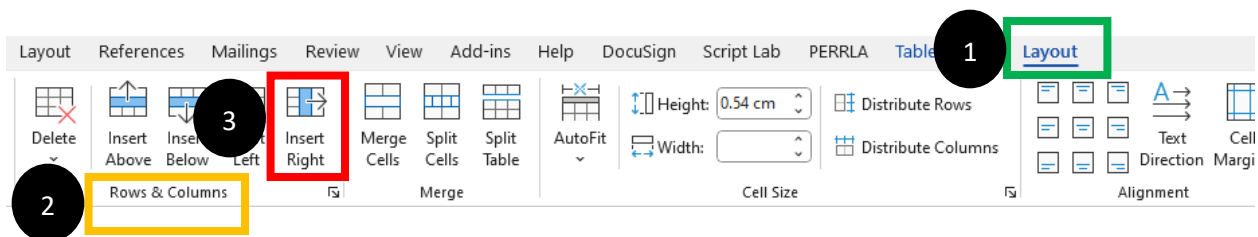
1. Open > YOUR MATRIC NO WORD PROCESSOR 4
2. Insert row
Highlight HAFIZ BIN SHAHRUL row > Layout > Rows & Columns > Insert Below
Fill in the row as shown below:

SITI BINTI ABU	70	58	63
----------------	----	----	----



3. Insert column
Highlight NAME column > Layout > Rows & Columns > Insert Right
Label the column as STATUS and fill in as below:

PASSED
PASSED
PASSED
FAILED
FAILED



4. Save a document
Save as YOUR MATRIC NO WORD PROCESSOR 5.

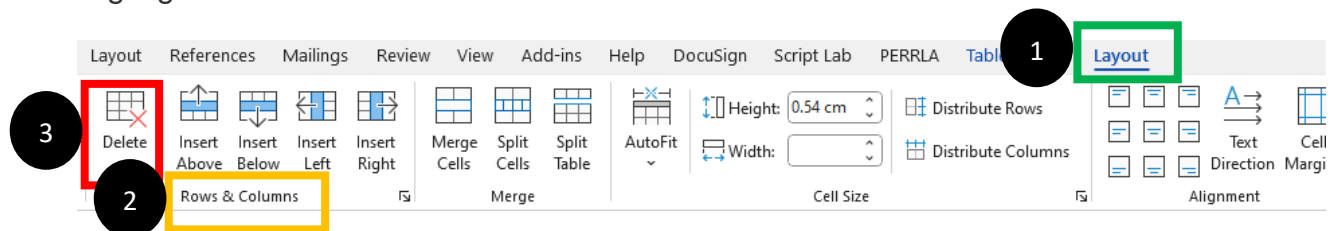
ACTIVITY

- i. Use table content features

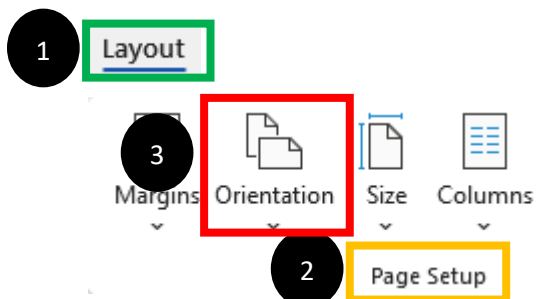
MICROSOFT WORD: LAB EXERCISE 6

Follow the instructions below:

5. Open > YOUR MATRIC NO WORD PROCESSOR 5
6. Delete rows
Highlight HAFIZ BIN SHAHRUL row > Delete: Delete Rows
7. Delete columns
Highlight QUIZ column > Delete: Delete Columns



8. Page orientation
Layout > Page Setup > Orientation > Landscape



9. Save a document
Save as YOUR MATRIC NO WORD PROCESSOR 6

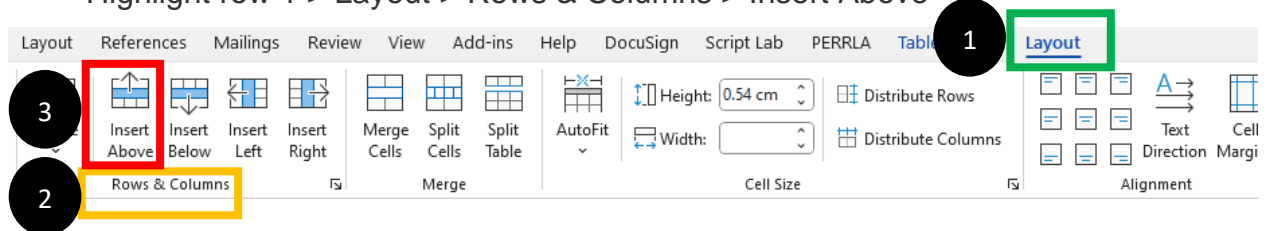
ACTIVITY

- i. Use table content features

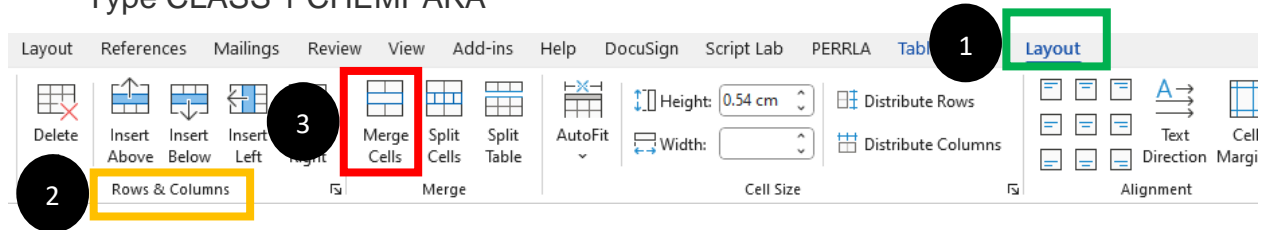
MICROSOFT WORD: LAB EXERCISE 7

Follow the instructions below:

1. Open > YOUR MATRIC NO WORD PROCESSOR 6
2. Insert row
Highlight row 1 > Layout > Rows & Columns > Insert Above



3. Merge cells
Highlight the new row > Layout > Rows & Columns > Merge Cells
Type CLASS 1 CHEMPAKA



4. Save a document
Save as YOUR MATRIC NO WORD PROCESSOR 7

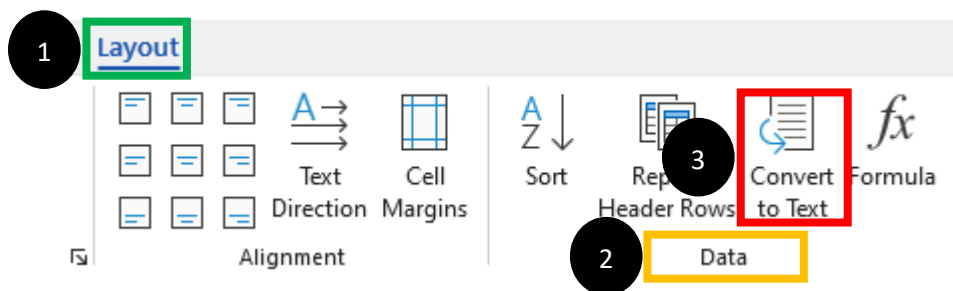
ACTIVITY

- i. Perform conversion from table to text.
- ii. Perform proofing and protection features

MICROSOFT WORD: LAB EXERCISE 8

Follow the instructions below:

1. Open > YOUR MATRIC NO WORD PROCESSOR 7
2. Convert table to text
Highlight the table > Layout > Data: Convert to Text > Tabs



3. Save a document
File > Save as > Browse ...> New Folder: COMPUTER APPLICATION> File Name: YOUR MATRIC NO WORD PROCESSOR 8
4. Protect document:
File > Protect Document > Encrypt with Password > Password: DBC

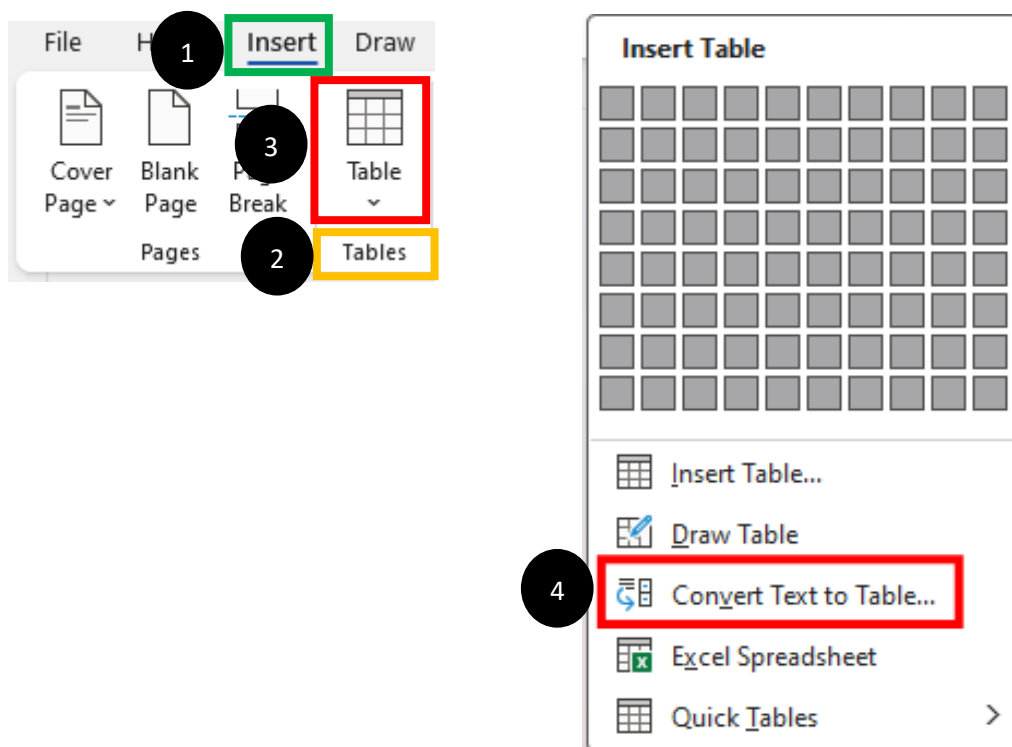
ACTIVITY

- i. Perform conversion from text to table.
- ii. Perform proofing and protection features

MICROSOFT WORD: LAB EXERCISE 9

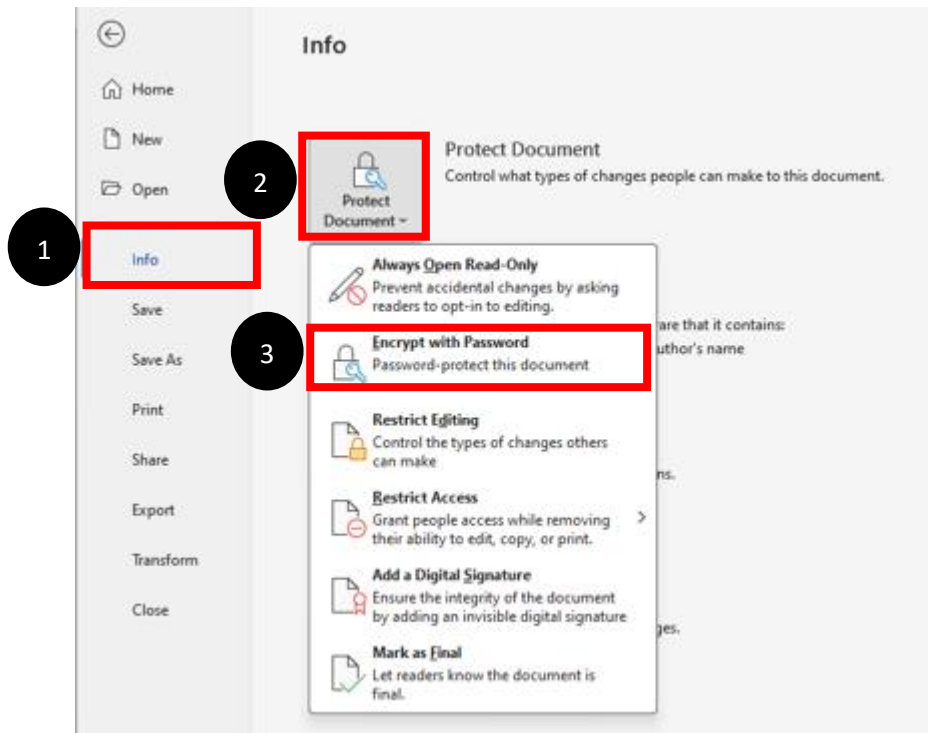
Follow the instructions below:

1. Open YOUR MATRIC NO WORD PROCESSOR 8
2. Convert text to table
Highlight the whole text > Insert > Tables: Convert Text to Table



3. Save a document
File > Save as > Browse ...> New Folder: COMPUTER APPLICATION> File Name: YOUR MATRIC NO WORD PROCESSOR 9

4. Protect document:
File > Protect Document > Encrypt with Password > Password: DBC



KNOWLEDGE CHECK



MICROSOFT EXCEL: INTRODUCTION



SCAN ME



- Instructions:
1. Scan the QR code
 2. Find the **matching image**
 3. Hold your handphone over the matching image and align it properly



ACTIVITY

- i. Practice using spreadsheet environment
- ii. Perform data entering and editing

MICROSOFT EXCEL: LAB EXERCISE 1

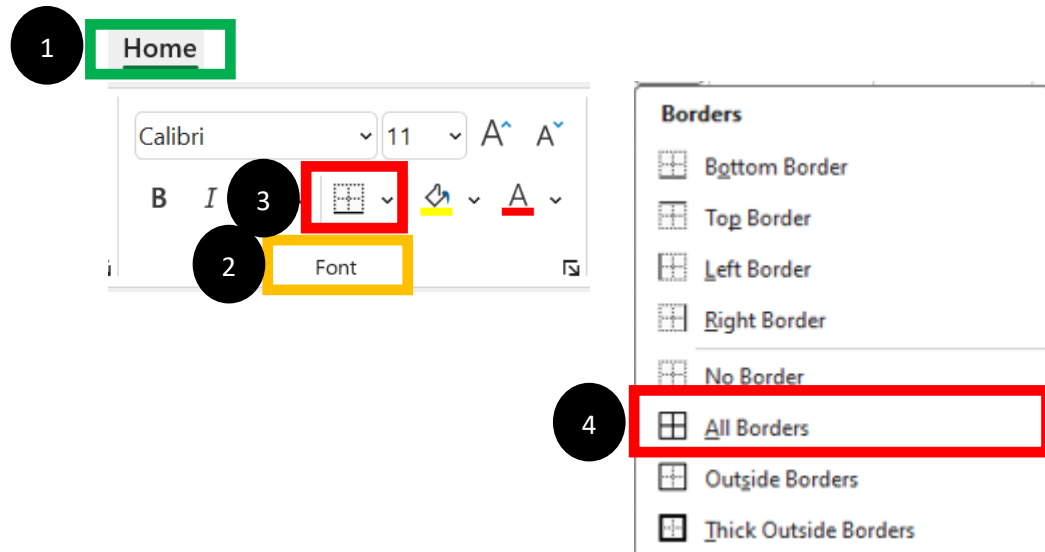
Follow the instructions below:

1. Enter the following data in a new worksheet.
2. Start with cell A1.

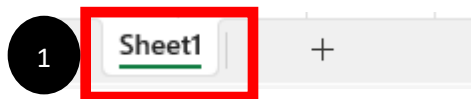
	A	B	C	D	E
1	STAFF ID	NAME	SALES (FEBRUARY)	ACHIEVE SALES TARGET	STAND OUT PERFORMER
2	E24S01	SITI BINTI ALI	7000		
3	E24S02	ABU BIN HASSAN	6000		
4	E24S03	NORA BINTI AHMAD	5500		
5	E24S04	ALYA BINTI ATAN	6600		
6	E24S05	BELLA BINTI ADI	4400		
7	E24S06	DIDI BIN DAUD	3600		
8	E24S07	FIFI BINTI FAIRUS	4500		
9	E24S09	JULIA BINTI JAMIL	3900		
10	E24S10	KAMAL BIN ADLI	4000		
11					
12	TOTAL				
13	AVERAGE				
14	HIGHEST				
15	LOWEST				
16	COUNT				
17	VLOOKUP				



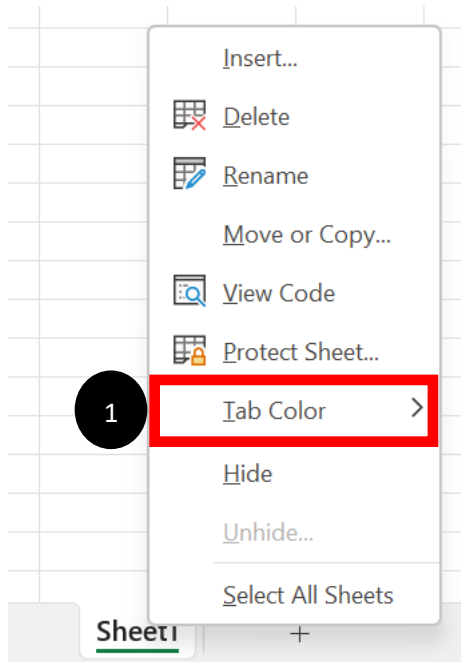
- Place borders around cells
Select the cells that contain the information > Home > Font: All Borders



- Rename a worksheet
Name the worksheet as **SALES**.
Double click the sheet tab > type **SALES**



- Change the color of a worksheet tab
Right click on the sheet tab > Tab Color: yellow



6. Save a workbook
Save the workbook as YOUR MATRIC NO SPREADSHEET 1



ACTIVITY

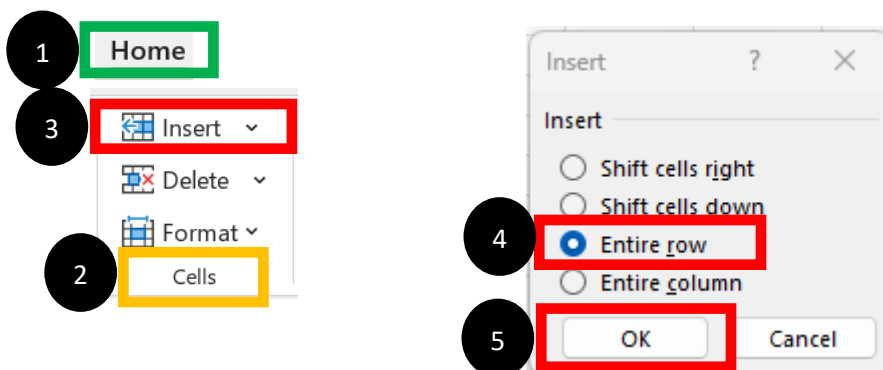
- i. Practice using spreadsheet environment
- ii. Perform data entering and editing
- iii. Perform modifying a worksheet and formatting cell
- iv. Perform function features

MICROSOFT EXCEL: LAB EXERCISE 2

Follow the instructions below:

1. Open > YOUR MATRIC NO SPREADSHEET 1
2. Apply special character attributes
Highlight the label for each column > Bold
3. Insert row
Click in cell E24S09 > Home > Cell: Insert: Insert > Entire row
Enter the following data in the new row.

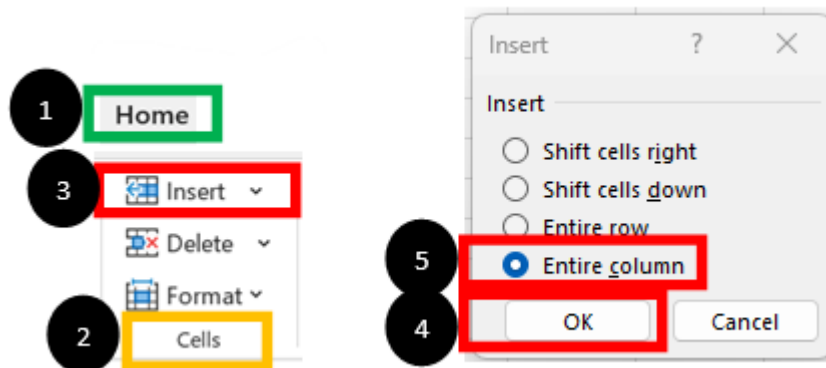
STAFF ID	NAME	SALES (FEBRUARY)
E24S08	HANA BINTI ARIF	3800





4. Insert a column between **NAME** and **SALES (FEBRUARY)**
Label the column as **SALES (JANUARY)**
Enter the following data in the new column

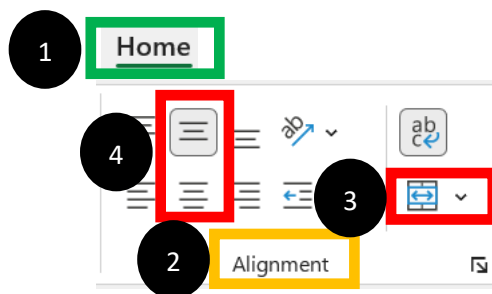
SALES (JANUARY)
3000
3500
2400
3400
2200
3900
2500
3300
2800
2700



5. Insert a row above the label of each column
Highlight row 1 > Home > Cell: Insert: Insert Cells > Entire row



6. Merge cells
 - a. Highlight cell A13-B13 > Home > Alignment > Merge & Center > Middle Align and Align Right
 - b. Highlight cell A14-B14 > Home > Alignment > Merge & Center > Middle Align and Align Right
 - c. Highlight cell A15-B15 > Home > Alignment > Merge & Center > Middle Align and Align Right
 - d. Highlight cell A16-B16 > Home > Alignment > Merge & Center > Middle Align and Align Right
 - e. Highlight cell A17-B17 > Home > Alignment > Merge & Center > Middle Align and Align Right
 - f. Highlight cell A18-B18 > Home > Alignment > Merge & Center > Middle Align and Align Right
 - g. Highlight cell C17-D17 > Home > Alignment > Merge & Center > Middle Align and Center
 - h. Highlight cell C18-D18 > Home > Alignment > Merge & Center > Middle Align and Center



7. Color the cell
Select C13-D17 > Home > Font > Fill Color: Blue
Select C18 > Home > Font > Fill Color: Green



8. Save a workbook
Save the workbook as YOUR MATRIC NO SPREADSHEET 2



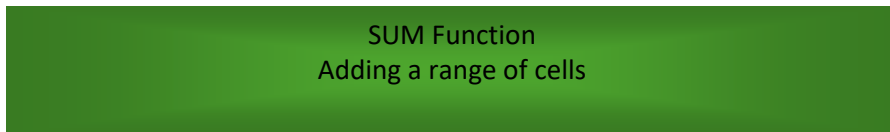
ACTIVITY

- i. Perform function features

MICROSOFT EXCEL: LAB EXERCISE 3

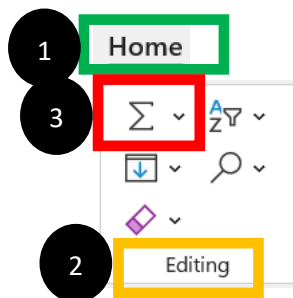
Follow the instructions below:

1. Using SUM function



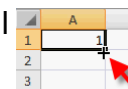
Calculate **total salary**.

Select cell C13 > Home > Editing > AutoSum: Sum > Select C2-C11 > Enter



2. Calculate **total sales**.

Select C13 > point the bottom right edge of the active cell > click > drag



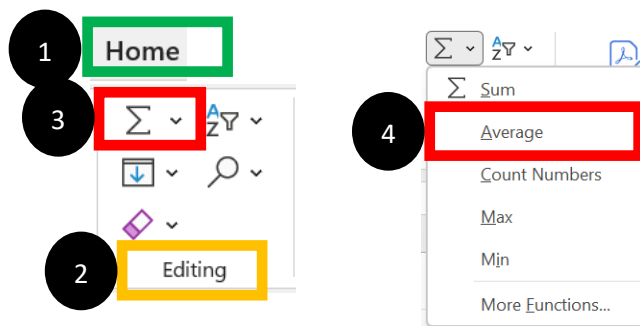


3. Using AVERAGE function

AVERAGE Function
Adds a range of cells and then divides by the number of cell entries

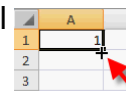
Calculate **average salary**.

Select cell C14 > Home > Editing > AutoSum: Average > Select C2 - C11 > Enter



4. Calculate **average sales**.

Select C14 > point the bottom right edge of the active cell



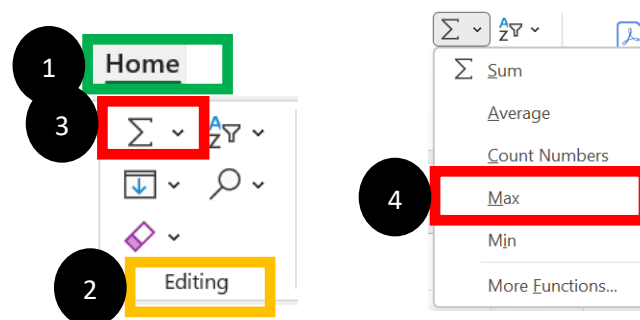
> click > drag

5. Using MAX function

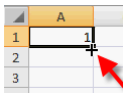
MAX Function
To determine the highest value in a set of values

Identify **highest salary**.

Select cell C15 > Home > Editing > AutoSum: Max > Select C2 - C11 > Enter





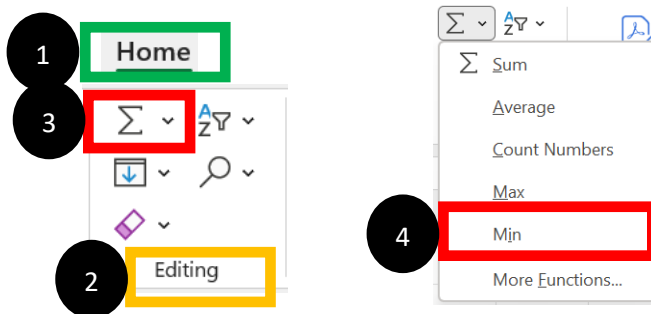
6. Identify **highest sales**.
Select C15 > point the bottom right edge of the active cell  > click > drag

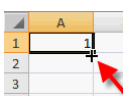
7. Using MIN function

MIN Function
To determine the lowest value in a set of values

Identify **lowest salary**.

Select cell C16 > Home > Editing > AutoSum: Min > Click cell C2 drag until cell C11 > Enter

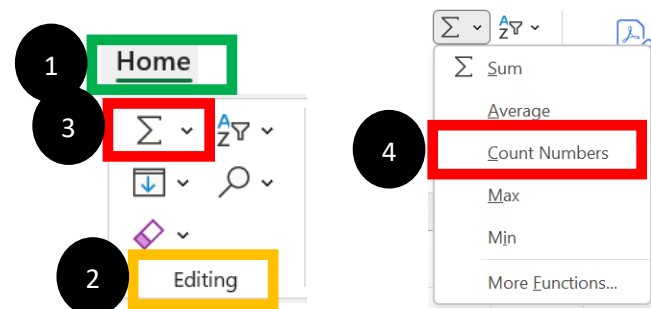


8. Identify **lowest sales**.
Select C16 > point the bottom right edge of the active cell  > click > drag

9. Using COUNT function

COUNT Function
To count the number of cells that contains numeric values.

Select cell C17 > Home > Editing > AutoSum: Count Numbers > Select C2 - D11 > Enter





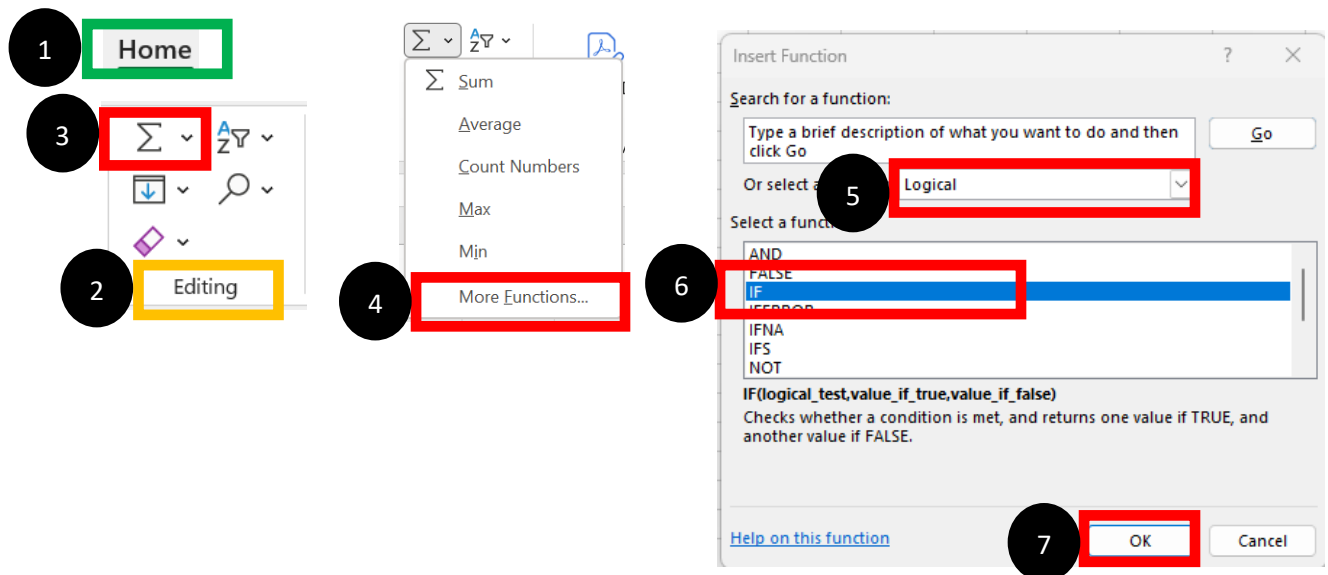
10. Using IF function

IF Function
IF Statement tests a given condition
It returns one value for a TRUE result and another value for a FALSE result.

Identify **staff achievement for the sales target**.

Condition:
Staff with **SALES (JANUARY) + SALES (FEBRUARY) is greater than or equal to 8000, achieve** the sales target.

Select cell I3 > Home > Editing > AutoSum > More Functions: IF





SALES (JANUARY) + SALES (FEBRUARY) is greater than or equal to 8000

ACHIEVE SALES TARGET is YES.

Function Arguments

IF

Logical_test	(C2+D2)>=8000	= TRUE
Value_if_true	"YES"	= "YES"
Value_if_false	"NO"	= "NO"

Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

Formula result = YES

[Help on this function](#) OK Cancel

FAIL TO ACHIEVE SALES TARGET is NO.



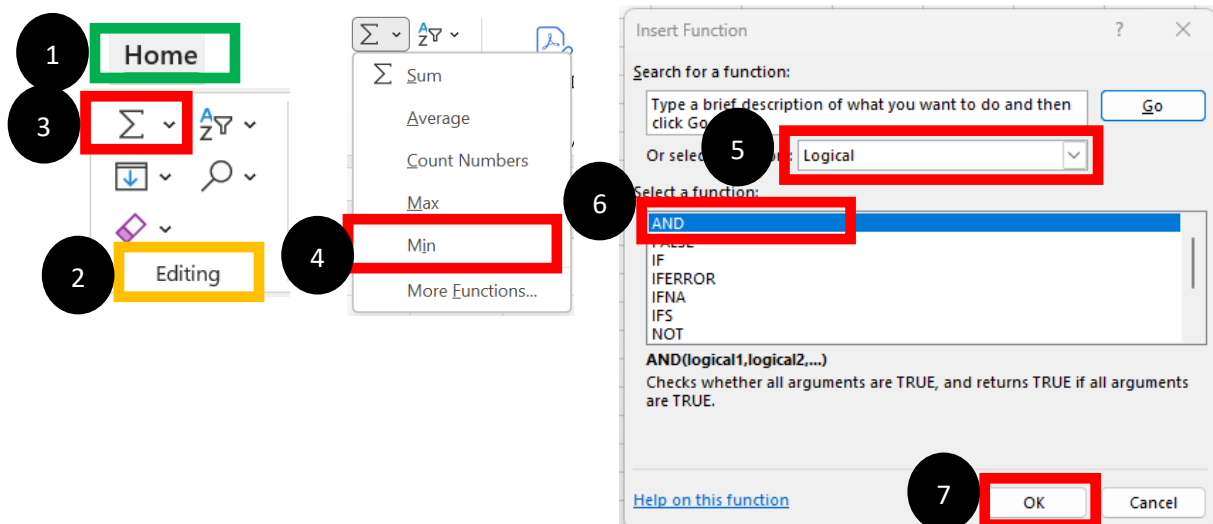
11. Using AND function

AND Function
To require more than one condition at the same time

Identify **stand out performer**.

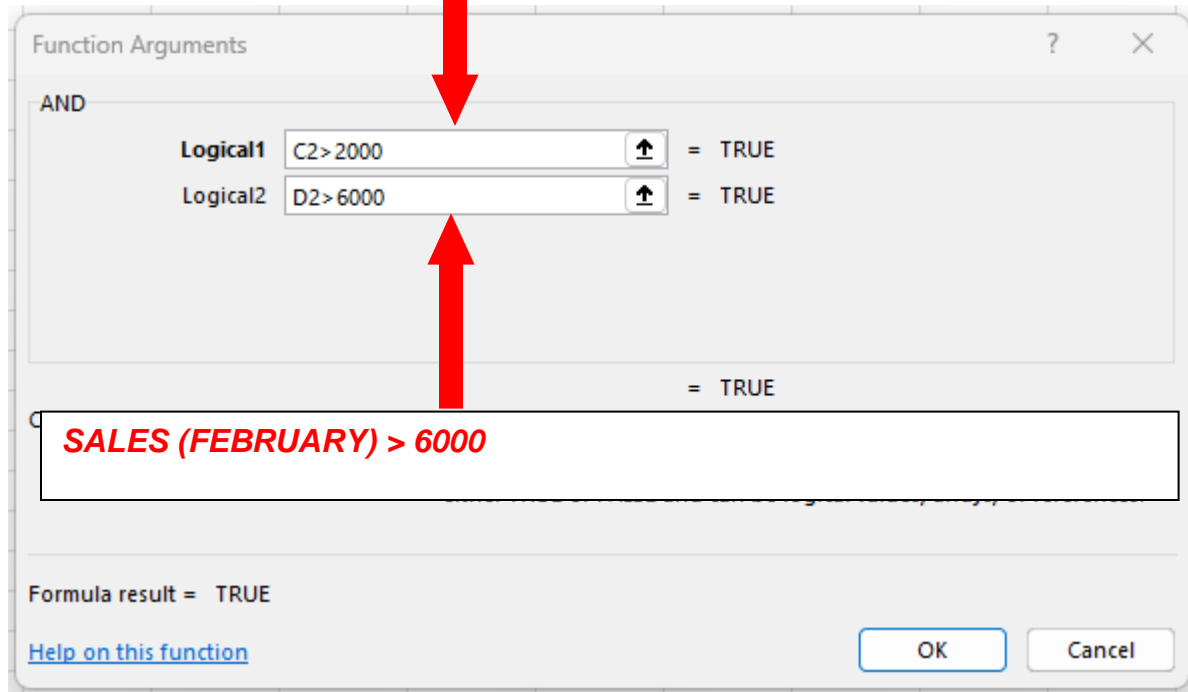
Condition:

When **SALES (JANUARY) > 2000** and **SALES (FEBRUARY) > 6000**, staff is awarded as stand out performer

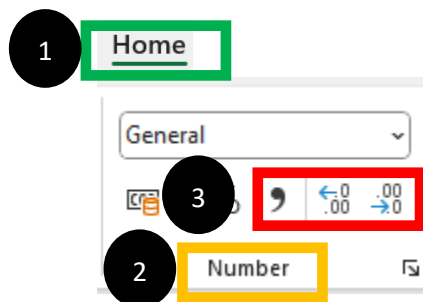




SALES (JANUARY) > 2000



11. Apply number format
Set the cell C2-D11 in two decimal places and comma style
Select C2 until D11 > Home > Number: Increase Decimal / Decrease Decimal > Comma Style



3. Save a workbook
Save the workbook as YOUR MATRIC NO SPREADSHEET 3



ACTIVITY

- i. Perform modifying a worksheet and formatting cell
- ii. Perform function features
- iii. Perform using chart features

MICROSOFT EXCEL: LAB EXERCISE 4

Symbol	Description	Example
+	Addition	=7+7
-	Subtraction	=9-7
*	Multiplication	=7*7
/	Division	=9/7
^	Exponentiation	=7^9

Follow the instructions below:

QUESTION 1

Calculate **net sales** based on the information below:

Sales	270555
(-) Return inwards	780
Net Sales	_____

Instruction:

1. Start with cell A1.
2. Apply number formats
Format the sales and return inwards amount in the form of numbers:
Home > Number fx > Number > Decimal places: 2 > Tick on use 1000 separator
3. Calculate net sales:
Select B3 > = B1 - B2
X ✓ fx =B1+B2
4. Rename worksheet
Name the worksheet as **NET SALES**



QUESTION 2

Calculate **Gross Profit** and **NET PROFIT** based on the information below:

Net Sales	527880
(-)Cost of goods sold	225374
Gross Profit	_____
(+) Revenue	156332
(-) Expenses	255147
NET PROFIT	_____

Instruction:

1. Add a new worksheet and rename it
Click new sheet button > Rename as **NET PROFIT**.
2. Start with cell A1.
3. Apply number formats
Format the amount in the form of numbers, decimal places: 0, use 1000 separator.

QUESTION 3

Enter the following data:

NAME	QUIZ 1	QUIZ 2	30%	TEST	70%
	20	20		60	
ALI	12.5	17		55	
ABU	15	5		58	
ATAN	14	16.37		40	
SITI	16	10		30	
ANI	12.55	19		20	
AMY	8	20		33	

Instruction:

1. Add a new worksheet and rename it
Click new sheet button > Rename as as **QUIZ**.
2. Start with cell A1.



3. Apply number formats
Format the amount in the form of numbers, decimal places: 2.
4. Calculate **total quiz marks** for each student using the following formula:
$$= \frac{(QUIZ\ 1 + QUIZ\ 2)}{40} \times 30$$
5. Calculate **total test marks** for each student using the following formula:
$$= \frac{TEST}{60} \times 70$$
6. Create a pie chart that shows the **total quiz marks** and the **total test marks** for **Abu**.
Select data for Abu (A4:F4) > Insert > Charts :3D Pie

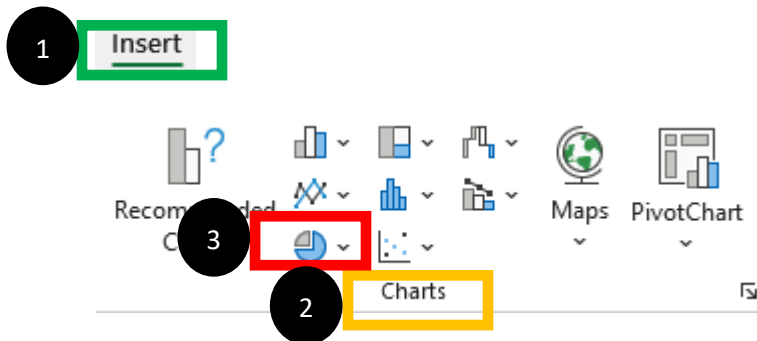
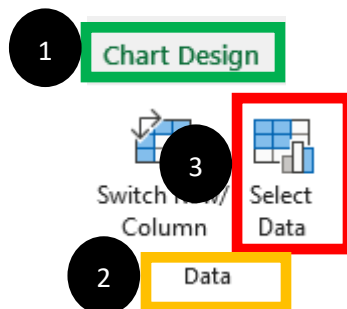
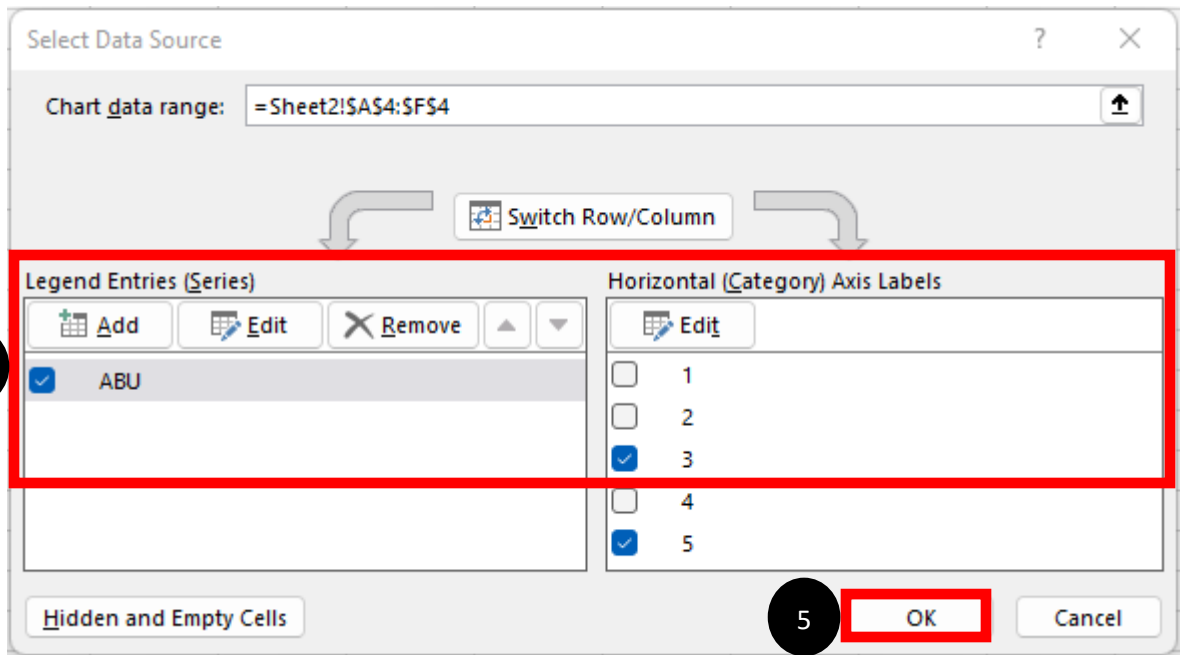


Chart Design > Data > Select Data >





8. Save a workbook
Save as YOUR MATRIC NUMBER SPREADSHEET 4



ACTIVITY

- i. Perform function features

MICROSOFT EXCEL: LAB EXERCISE 5

Follow the instructions below:

1. Create a workbook
Save as > YOUR MATRIC NO SPREADSHEET 6

2. Enter the following data:

ORDER ID	101	102	103
UNIT PRICE	MYR 15.00	MYR 20.00	MYR 70.00
QUANTITY	5	3	10

3. Start with cell A1
4. Using HLOOKUP function

HLOOKUP Function
To look up data in a table organized horizontally.

Identify unit price for order ID 102

Select cell A7 > Home > Editing > AutoSum > More Functions: Lookup & Reference > HLOOKUP > OK >

The screenshot illustrates the steps to insert the HLOOKUP function in Microsoft Excel. It shows the Home tab, the Editing group, the More Functions... option, the Lookup & Reference category, the HLOOKUP function selected, and the OK button.



The value you want to look up

The range of rows where your lookup value is located

The row that contains return value

Approximate match (TRUE) or Exact match (FALSE)

Formula result = 20

ORDER ID	UNIT PRICE	QUANTITY
101	MYR 15.00	5
102	MYR 20.00	3
103	MYR 70.00	10

5. Rename worksheet
Name the worksheet as **HLOOKUP**
 7. Add a new worksheet and rename it
Click new sheet button > Rename as **VLOOKUP**.
 5. Enter the following data:
Start with cell F1
- | ORDER ID | UNIT PRICE | QUANTITY |
|----------|------------|----------|
| 101 | MYR 15.00 | 5 |
| 102 | MYR 20.00 | 3 |
| 103 | MYR 70.00 | 10 |
6. Start with cell F1



7. Using VLOOKUP function

VLOOKUP Function
To look up data in a table organized vertically

Identify unit price for order ID 103

Select cell A7 > Home > Editing > AutoSum > More Functions: Lookup & Reference > VLOOKUP > OK >

The screenshot shows the Excel ribbon with the 'Home' tab selected (1). The 'Editing' group is highlighted (2). The 'More Functions...' option is selected (3). The 'Insert Function' dialog box is open, showing the 'Lookup & Reference' category selected (4). The 'VLOOKUP' function is selected in the list (5). The 'OK' button is highlighted (6).

The 'Function Arguments' dialog box for VLOOKUP is shown. The arguments are: Lookup_value: 103; Table_array: F1:H4; Col_index_num: 2; Range_lookup: FALSE. The formula result is MYR 70.00. Callouts explain: 'The value you want to look up' points to the Lookup_value field; 'The range of columns where your lookup value is located' points to the Table_array field; 'The column that contains return value' points to the Col_index_num field; 'Approximate match (TRUE) or Exact match (FALSE)' points to the Range_lookup field.

8. Save a workbook Save as MATRIC NUMBER SPREADSHEET 5



ACTIVITY

- i. Perform using chart features
- ii. Practice using printing and protection of worksheet or workbook features

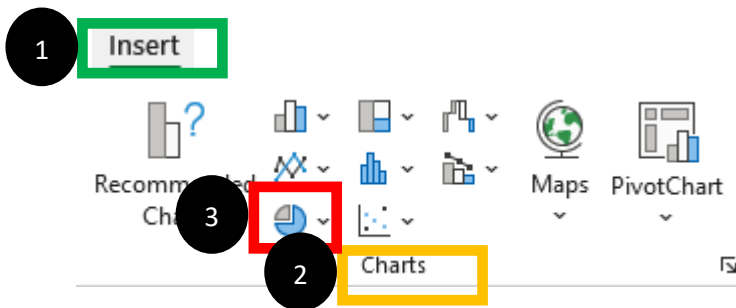
MICROSOFT EXCEL: LAB EXERCISE 6

Follow the instructions below:

1. Enter the following data:

MONTH	QUANTITY	AMOUNT
January	200	450
February	350	787.5
March	195	438.75
April	210	472.5
May	250	562.5
June	235	528.75

2. Start with cell A1
3. Create pie chart that shows Month and Quantity
Select data MONTH and QUANTITY (A1:B7) >Insert > Charts: 3D Pie



4. Create bar chart using Month and Amount
Select data A1:C7 >Insert > Charts: Insert Column or Bar Chart > 2D Bar

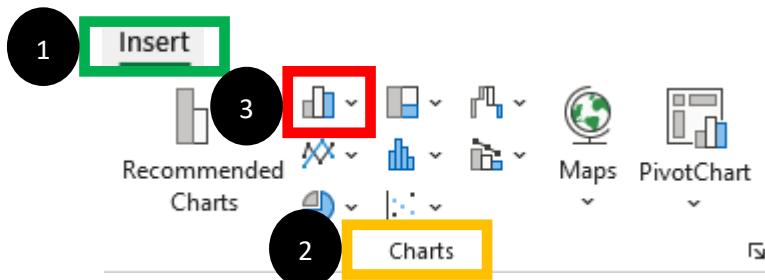
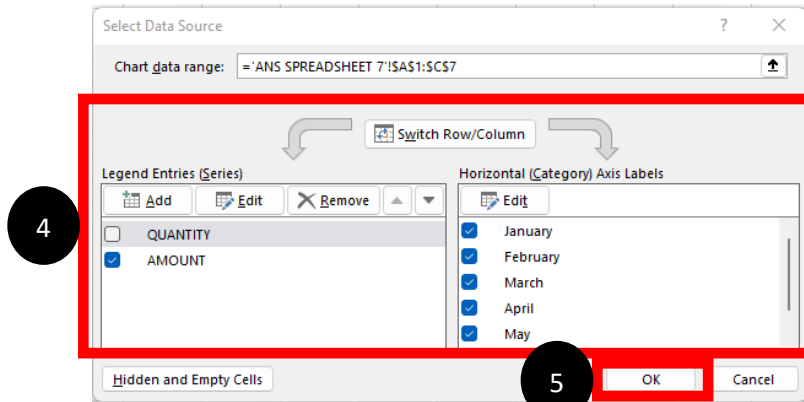


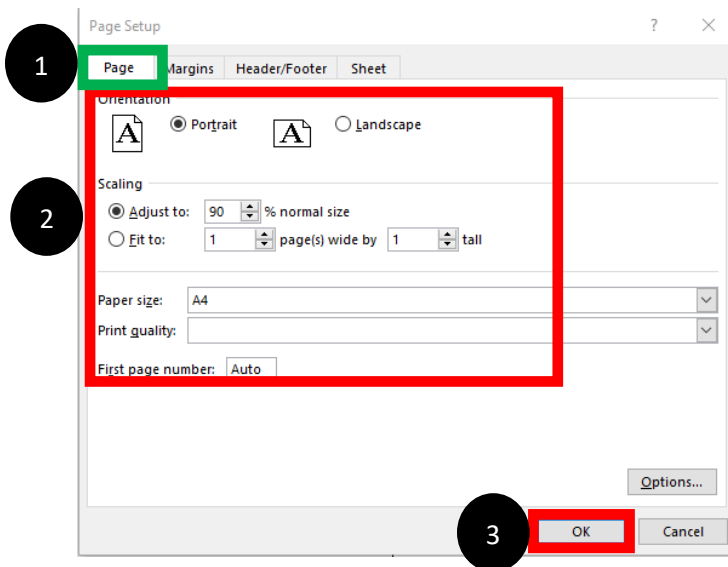


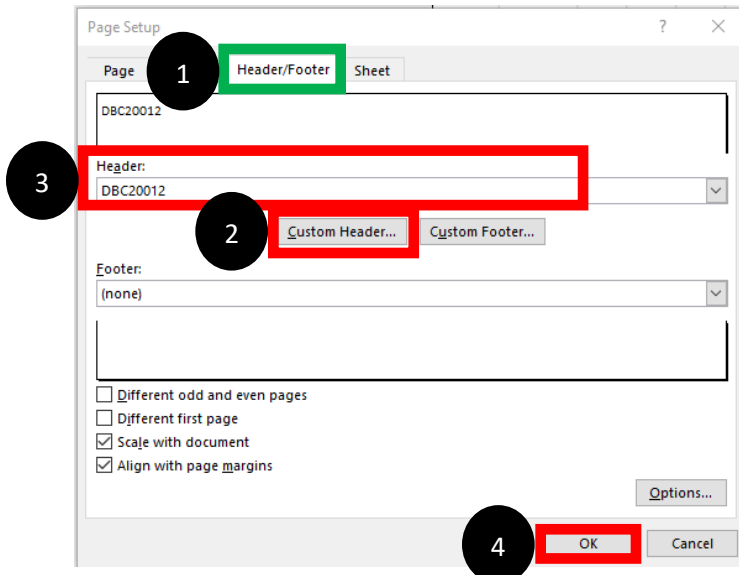
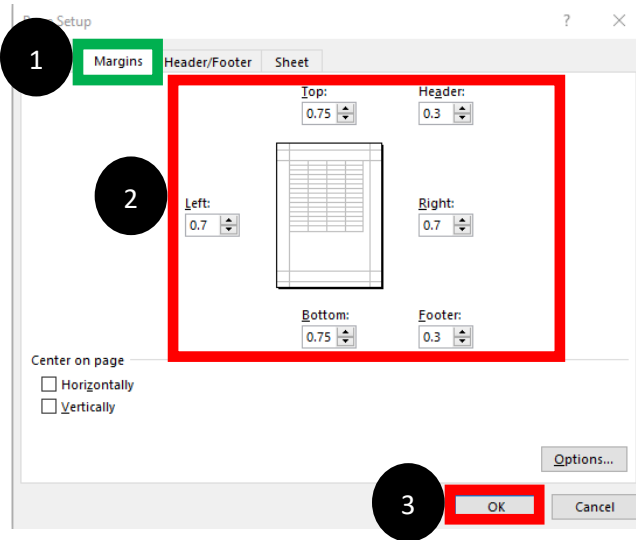
Chart Design > Data > Select Data >



Change title to SALES (RM)

5. Save a workbook
Save as YOUR MATRIC NUMBER SPREADSHEET 6
6. Print the worksheet
File > Print > Page Setup >







7. Protect a worksheet
Review > Protect > Protect Sheet > Password to unprotect sheet: DBC

The image illustrates the steps to protect a worksheet in Microsoft Excel. It shows the 'Review' tab on the ribbon, the 'Protect Sheet' button, the 'Protect' dropdown menu, the password entry field, and the 'Protect Sheet' dialog box.

1. The **Review** tab is selected on the ribbon.
2. The **Protect Sheet** button is clicked.
3. The **Protect** dropdown menu is expanded, showing options: Protect Sheet, Protect Workbook, Allow Edit Ranges, and Unshare Workbook.
4. The password **DBC** is entered in the 'Password to unprotect sheet:' field.
5. The **Protect Sheet** dialog box is shown with the following options checked:
 - Protect worksheet and contents of locked cells
 - Select locked cells
 - Select unlocked cellsOther options like Format cells, Format columns, Format rows, Insert columns, Insert rows, Insert hyperlinks, Delete columns, Delete rows, Sort, Use AutoFilter, Use PivotTable and PivotChart, Edit objects, and Edit scenarios are unchecked.
6. The **OK** button is clicked to apply the protection.



8. Require a password to open the workbook
File > Info > Protect Workbook > Encrypt with Password: the password is **DBC**

The image shows a screenshot of the Microsoft Excel 'Info' pane. On the left, the 'Info' tab is selected, highlighted with a red box and a circled '1'. In the center, the 'Protect Workbook' option is highlighted with a red box and a circled '2'. On the right, the 'Encrypt with Password' option is highlighted with a red box and a circled '3'. Below the 'Info' pane, a list of options is shown, including 'Always Open Read-Only', 'Protect Current Sheet', 'Protect Workbook Structure', 'Restrict Access', 'Add a Digital Signature', and 'Mark as Final'.

1 Info

2 Protect Workbook
Control what types of changes people can make to this workbook.

3 Encrypt with Password
Require a password to open this workbook.

Always Open Read-Only
Prevent accidental changes by asking readers to opt-in to editing.

Protect Current Sheet
Control what types of changes people can make to the current sheet.

Protect Workbook Structure
Prevent unwanted changes to the structure of the workbook, such as adding sheets.

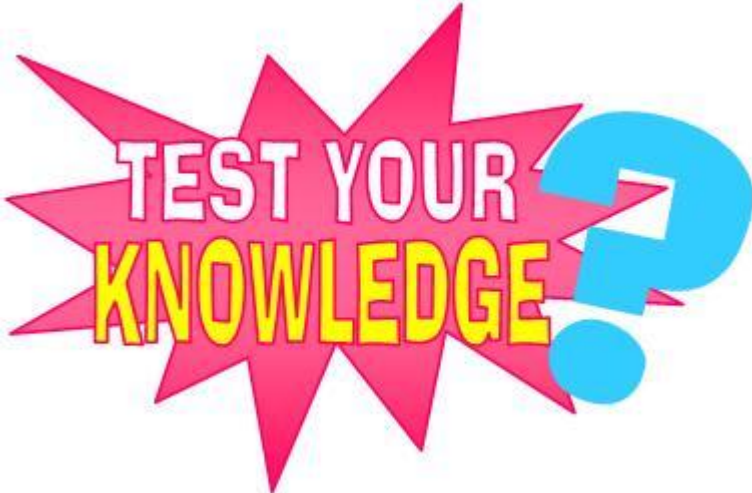
Restrict Access
Grant people access while removing their ability to edit, copy, or print.

Add a Digital Signature
Ensure the integrity of the workbook by adding an invisible digital signature.

Mark as Final
Let readers know the document is final.



MICROSOFT EXCEL: KNOWLEDGE CHECK



MICROSOFT POWERPOINT: INTRODUCTION



- Instructions:
1. Scan the QR code
 2. Find the **matching image**
 3. Hold your handphone over the matching image and align it properly

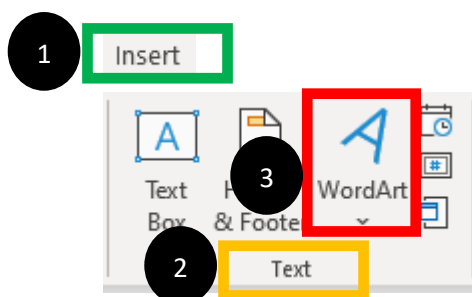
ACTIVITY

- i. Create new slide presentation
- ii. Perform slide master and transition features
- iii. Perform illustration groups features
- iv. Perform features of insert comment and hyperlink
- v. Perform presentations and use protection features

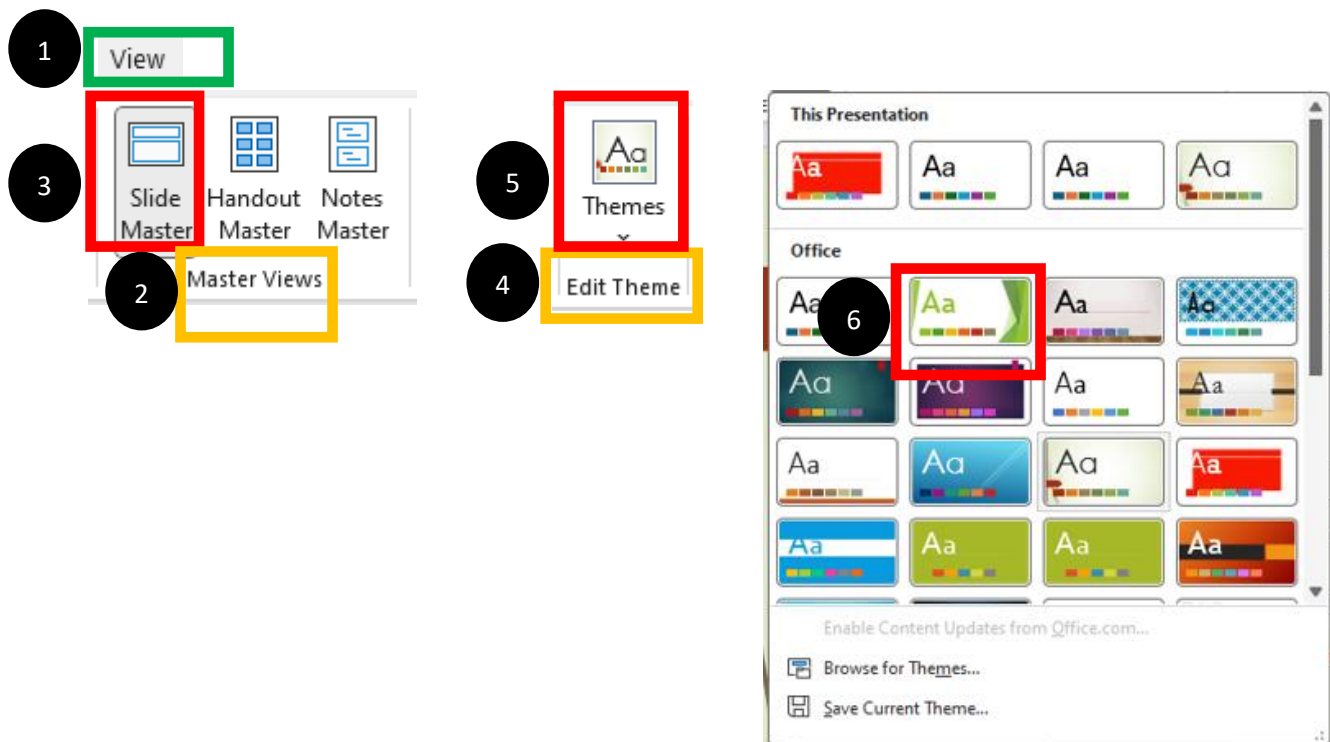
MICROSOFT POWERPOINT: LAB EXERCISE 1

Follow the instructions below:

1. Create a new presentation
Windows key > Find and click PowerPoint > Blank presentation
2. Create a presentation with title: Logo in Marketing Today
Insert > Text > Word Art
Type the title on the first slide



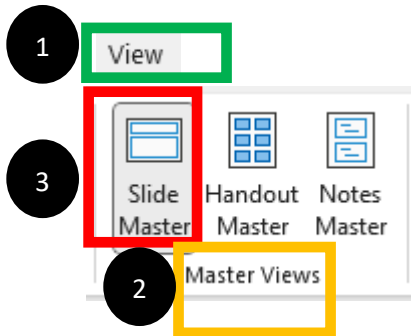
3. Slide master for theme
View > Master Views > Slide Master > Edit Theme > Theme



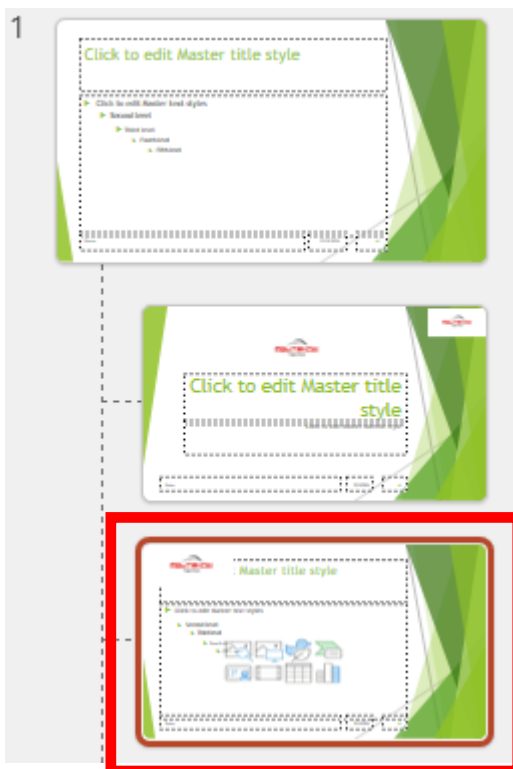
4. Slide master for logo
a) Search for the following logo and save.



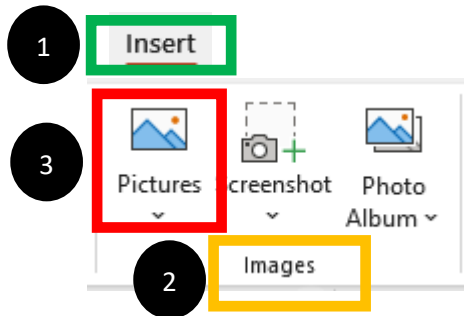
b) View > Master Views > Slide Master



c) Select this slide:

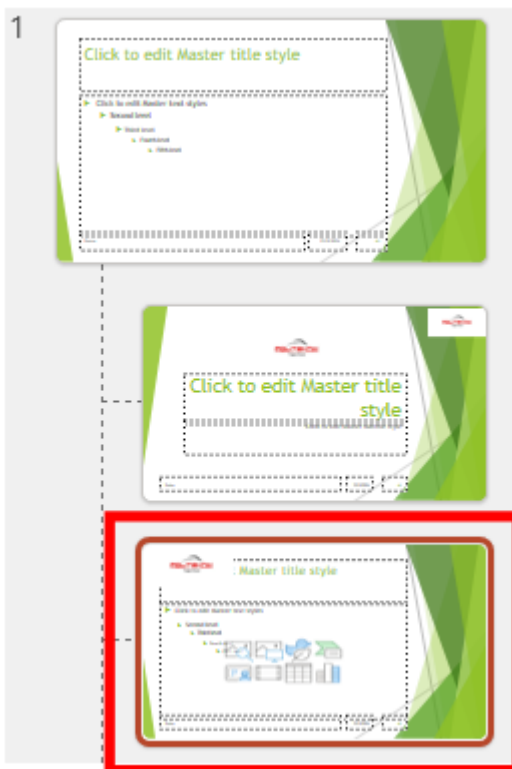


d) Insert > Images > Pictures >

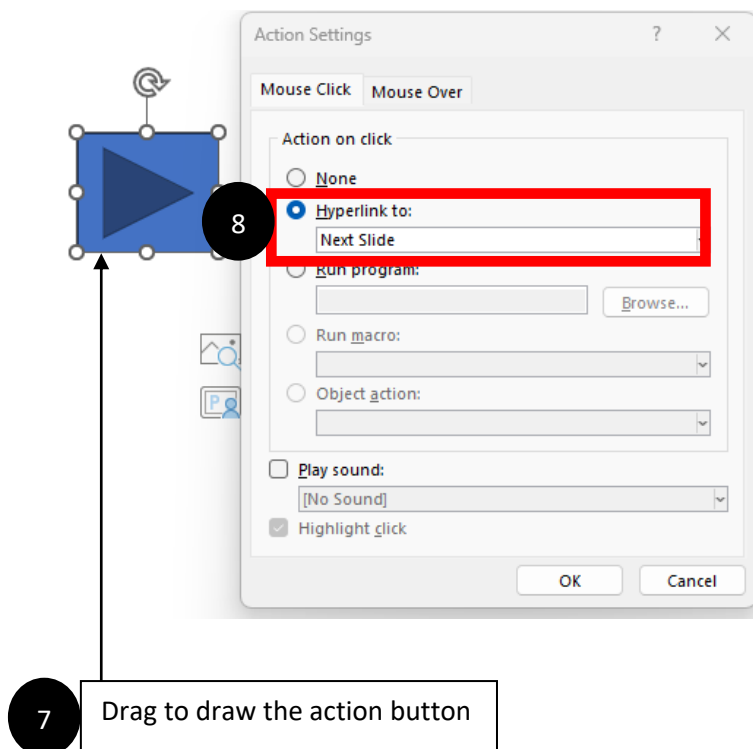
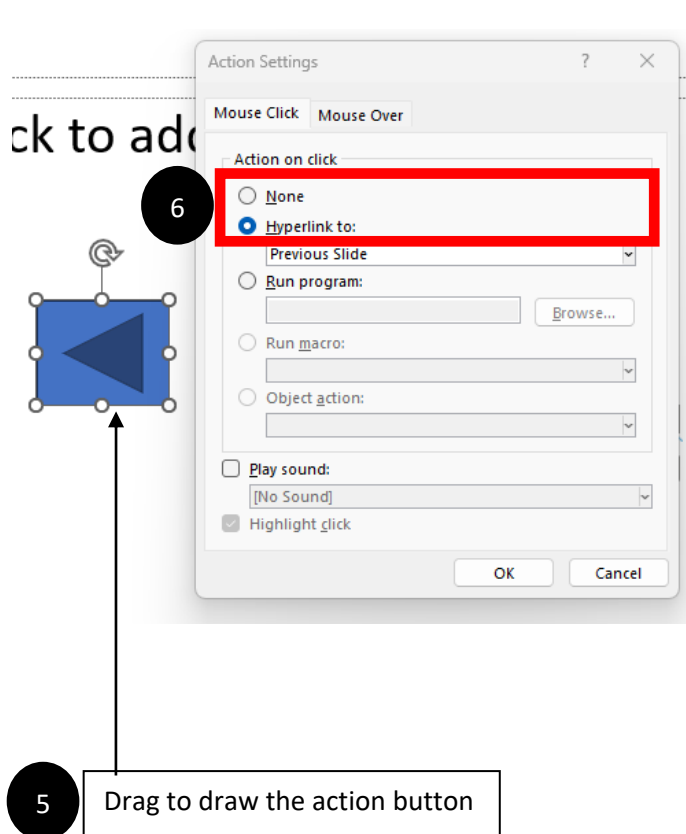
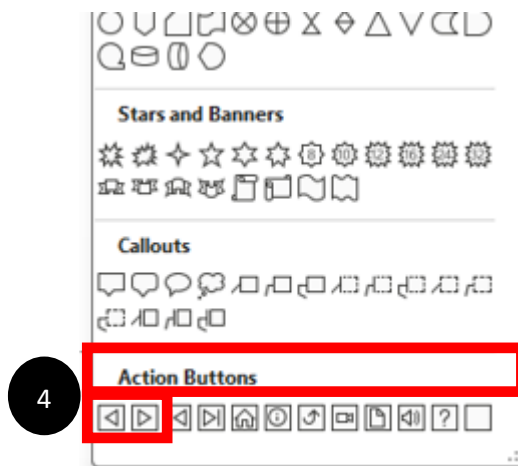
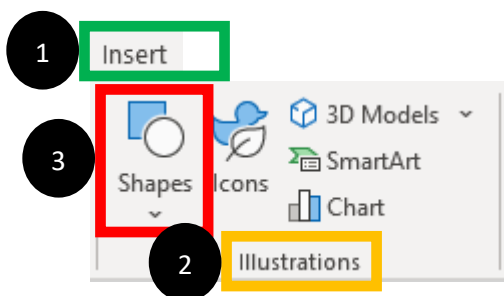


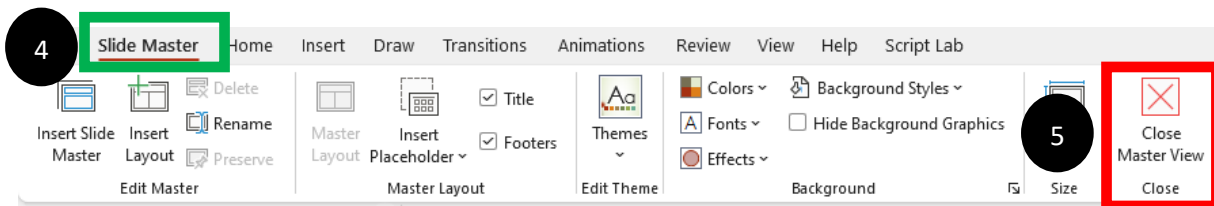
5. Insert action button at slide master

a) Select this slide:

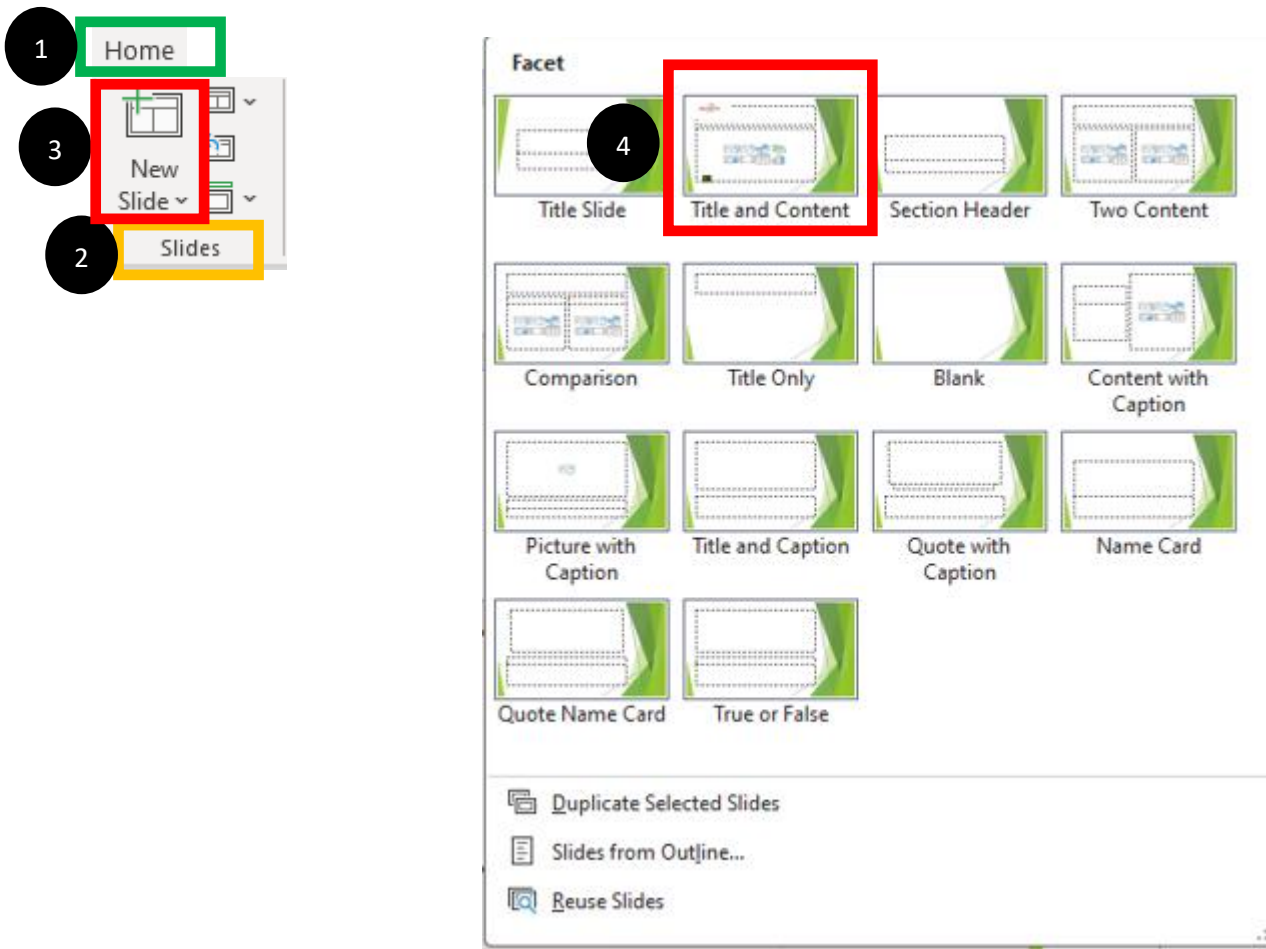


b) Insert > Illustrations > Shapes: Action Buttons
 Insert the following action button





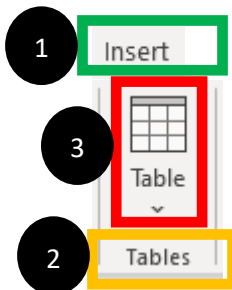
6. Add new slide
Home > Slides > New Slide > Title and Content



7. Choose Title and Content layout for each slide
Type the title for each slide as follow:

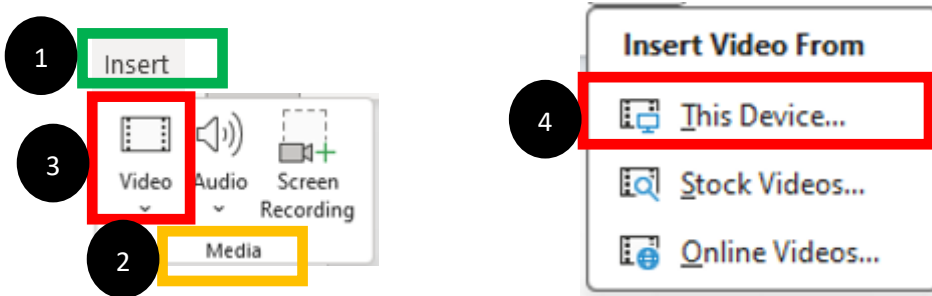
Slide number	Title
2	Table of contents
3	What is logo?
4	The Importance Of Logo
5	FedEx Logo Meaning
6	Amazon Logo Meaning
7	Baskin Robbins Logo Meaning
8	Audi Logo Meaning
9	Gucci Logo Meaning
10	BMW Logo Meaning

8. For slide number 2, create the following table:
Insert > Table



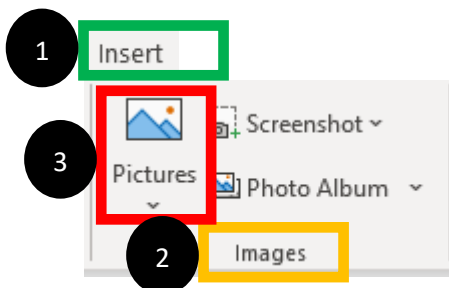
1	What is logo?
2	The Importance of Logo
3	FedEx Logo Meaning
4	Amazon Logo Meaning
5	Baskin Robbins Logo Meaning
6	Audi Logo Meaning
7	Gucci Logo Meaning
8	BMW Logo Meaning

9. Find suitable video related to *the importance of logo*.
 Insert the video in slide number 4.
 Insert > Media > Video > This Device

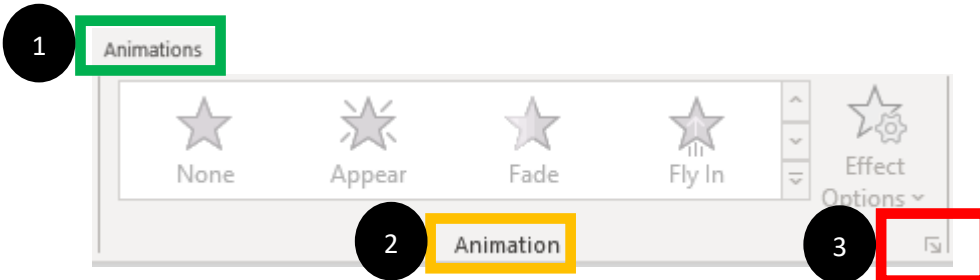


10. Find suitable contents for each slide.

11. Insert logo for each slide
 Insert > Images > Pictures

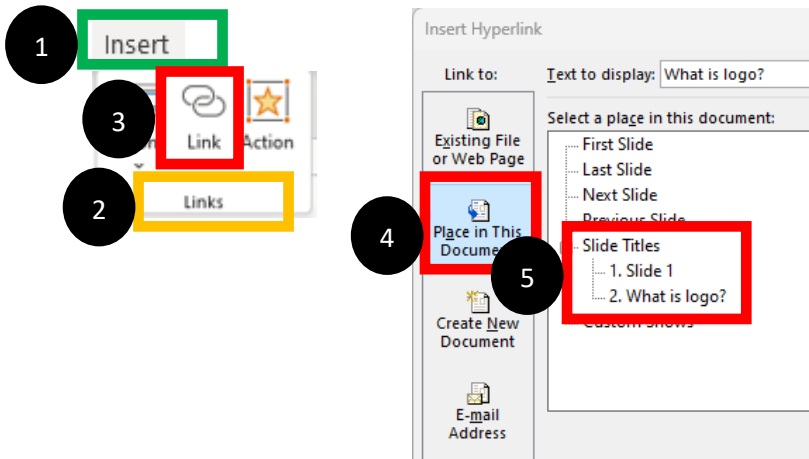


12. Insert animation features
 Click logo > Animation > Select an animation



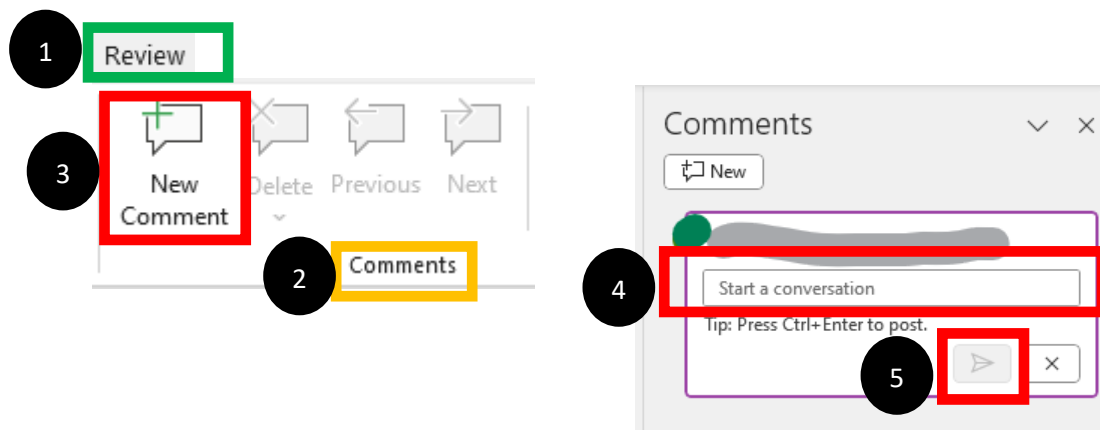
Logo	Animation
FedEx	Bounce
Amazon	Grow/Shrink
Baskin Robbins	Fly in
Audi	Spin
Gucci	Appear
BMW	Spilt

13. Insert hyperlink
 In slide 2 > Highlight *What is logo?* > Insert > Links > Link > Place in This Document > Slide Titles: What is logo?

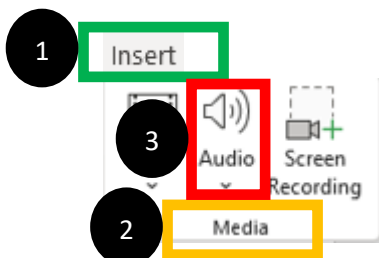


Insert hyperlink for each title in table contents.

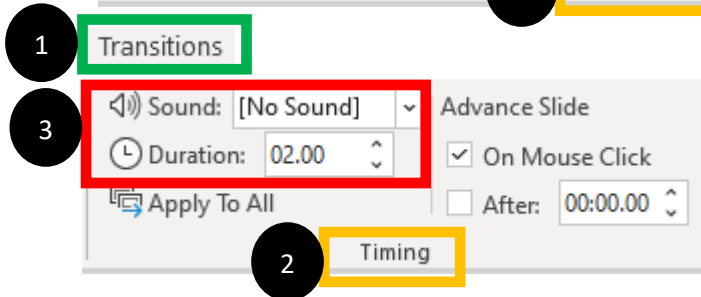
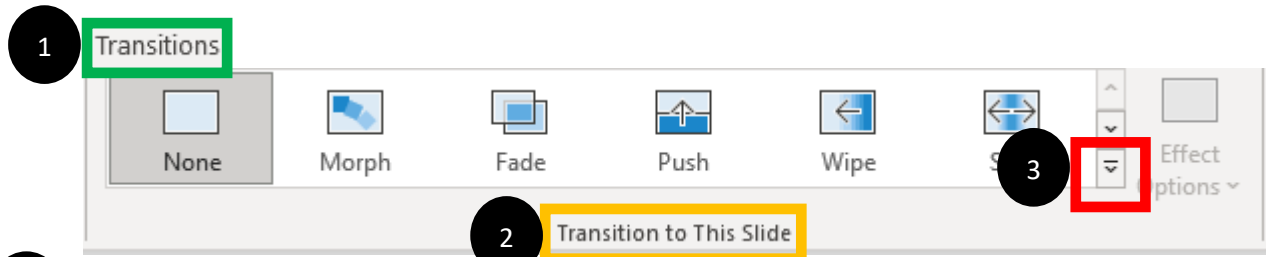
14. Insert a comment
 Go to slide number 10 > Review > Comments > New Comment > Type your comment:



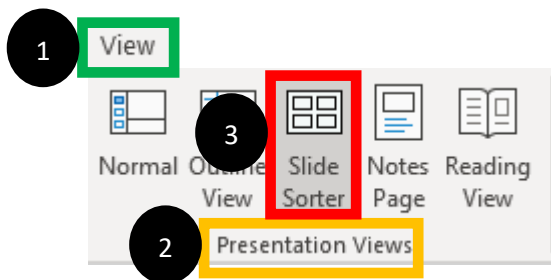
15. Insert audio
 Insert Suitable Audio
 Insert > Media > Audio



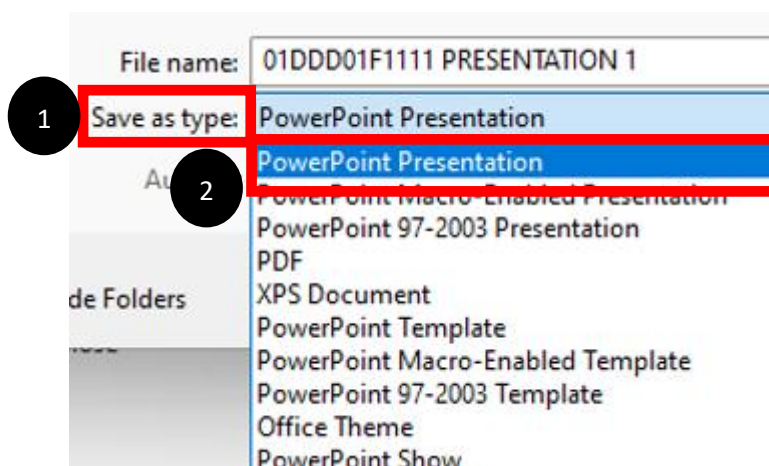
16. Insert transition features
 Transition > Transition to This Slide: Choose the relevant transition > Timing:
 Set Sound and Duration



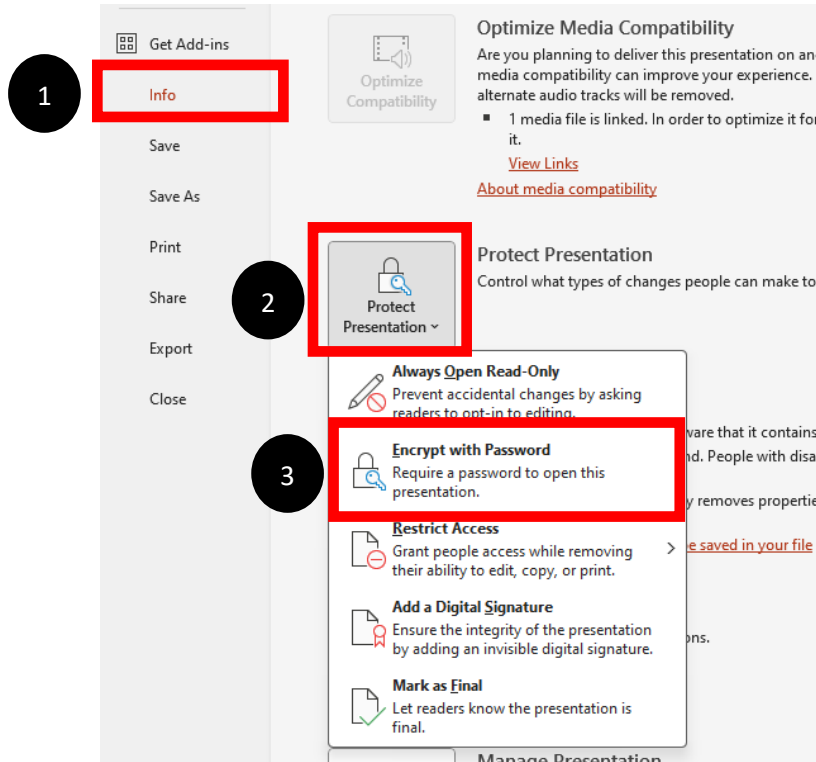
17. Use slide sorter
 View > Presentation Views > Slide sorter



18. Save as YOUR MATRIC NUMBER PRESENTATION 1.
 File > Save as > Save as type: PowerPoint Presentation



19. Require a password to open the presentation
Open your YOUR MATRIC NUMBER PRESENTATION 1 in PowerPoint Presentation format
File > Info > Protect Presentation > Encrypt with Password > Password: DBC



MICROSOFT POWERPOINT: KNOWLEDGE CHECK





MICROSOFT PROJECT: PRIMARY USER INTERFACE



- Instructions:
1. Scan the QR code
 2. Find the **matching image**
 3. Hold your handphone over the matching image and align it properly



ACTIVITY

- i. Practice using project management features
- ii. Perform task list and relationship features
- iii. Perform resource management features
- iv. Perform Gantt chart views, formatting and printing features
- v. Perform project schedule and progress tracking features

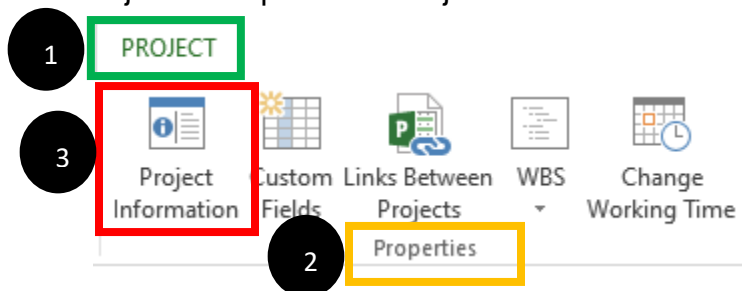
MICROSOFT PROJECT: LAB EXERCISE 1

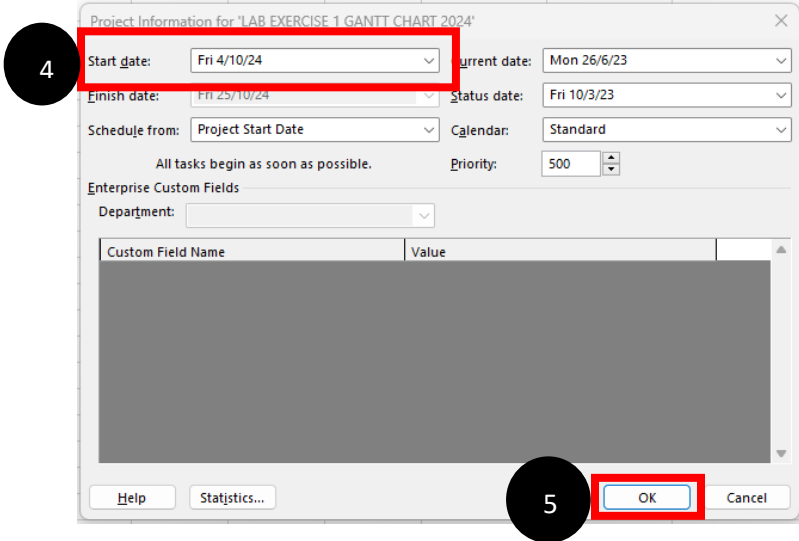
Follow the instructions below:

1. Create a Gantt Chart for the following project plan.

TASK	START	DURATION	PERSON IN CHARGE	MATERIAL	COST
Phase 1	4 October 24	7 days			
Task A	4 October 24	1 day	Adam		
Task B	7 October 24	3 days	Orkid	Paper	
Task C	10 October 24	3 days	Idris		Travelling
Phase 2	15 October 24	6 days			
Task D	15 October 24	2 days	Cempaka		
Task E	15 October 24	3 days	Musa		
Task F	18 October 24	1 days	Nuh		

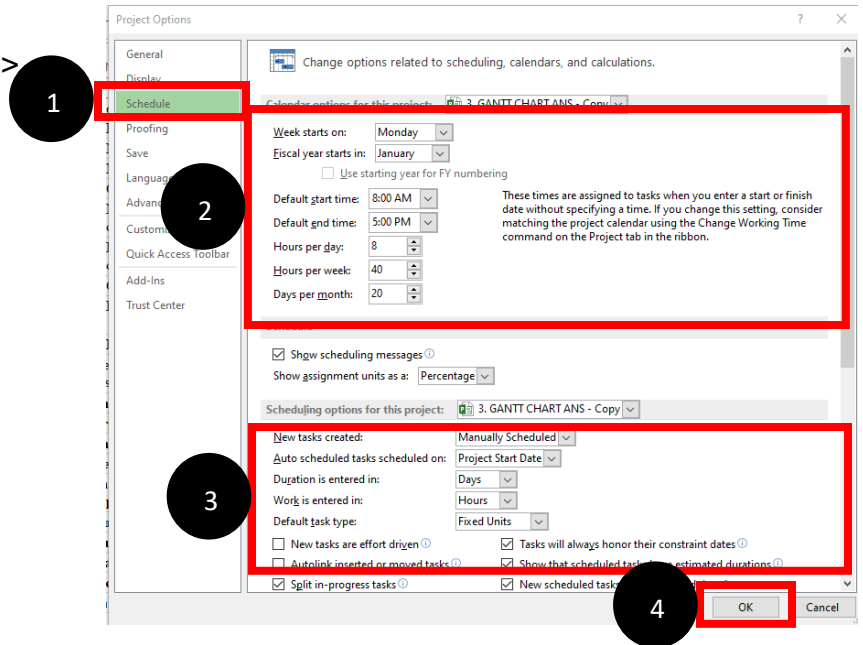
2. Set the start date.
Project > Properties > Project Information





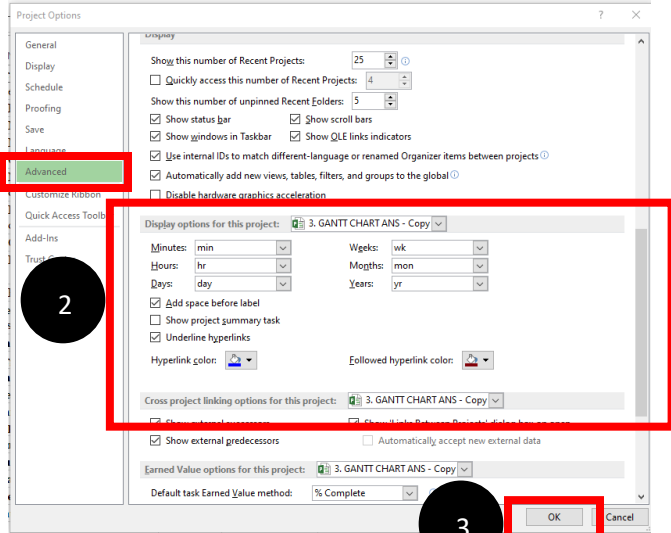
3. Set the calendars, calculations and scheduling for the project

File > Options > Schedule >

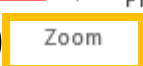




File > Options > Advanced >



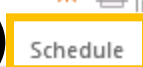
4. View > Zoom > Timescale



5. Key in **Task Name**, **Start** and **Duration**

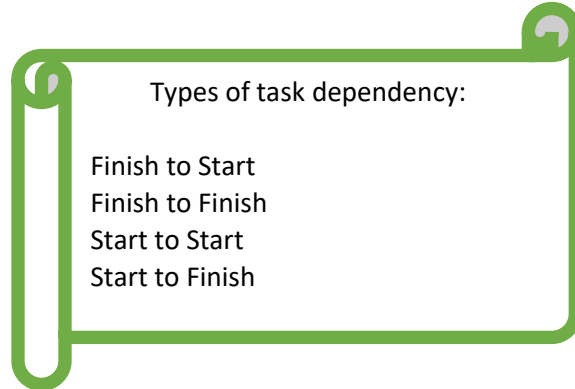
Insert subtask:

Select Task A, Task B and Task C > Task > Schedule > Indent Task: Right
Repeat this step for Task D, Task E and Task F.





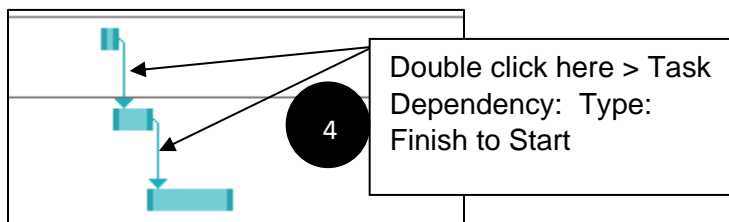
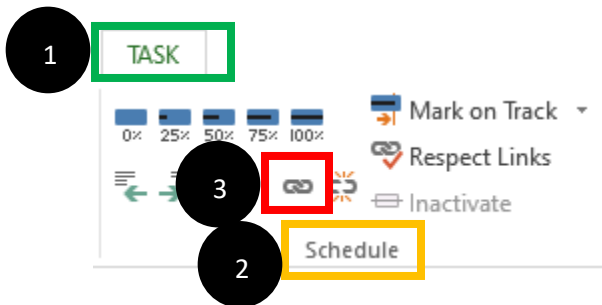
6. Link the selected task and task dependency:



Highlight the:

Task A
Task B
Task C

Task > Schedule > Link the Selected Task >



Predecessors will automatically appear.



7. Link the selected task and task dependency for all subtask of **Phase 2**
Task Dependency:

Task D	Start to start
Task E	
Task E	Finish to start
Task F	

8. Setting up resources:

Resources
Anything required to perform a task.
There are three main type of resources; work, materials and cost.

a)



Click: Resource

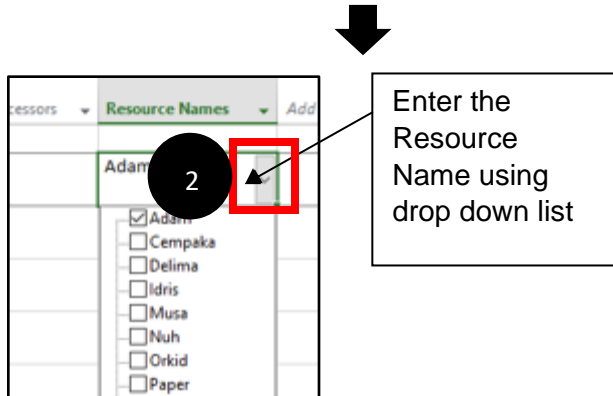
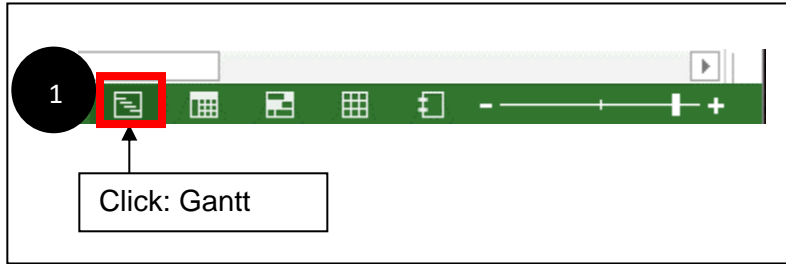
Fill in the resource sheet with the information below:

Resource Name	Type	Material	Initials	Group	Max.	Std. Rate
Adam	Work		A		100%	M20.00/hr
Orkid	Work		O		100%	M30.00/hr
Idris	Work		I		100%	M40.00/hr
Cempaka	Work		C		100%	M50.00/hr
Musa	Work		M		100%	M60.00/hr
Nuh	Work		N		100%	M75.00/hr
Paper	Material	Ream	P			RM12.00
Travelling	Cost		T			

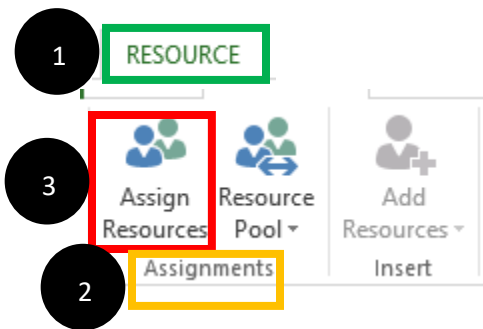
2



b)



9. Assign resources
Select on Task Name: Task B > Resource > Assignments > Assign Resources > Paper > Units: 3 reams





Assign Resources

Task: Task B

Resource list options

Resources from Project1

	Resource Name	R/D	Units	Cost
✓	Orkid		100%	RM720.00
✓	Paper	4	3 Ream	RM36.00
	Adam			
	Cempaka			
	Idris			
	Musa			
	Nuh			
	Travelling			

Assign
Remove
Replace...
Graph
Close
Help

Hold down Ctrl and click to select multiple resources

10. Assign resources

Select on Task Name: Task C > Resource > Assignments > Assign Resources > Travelling > Cost: 500

1 RESOURCE

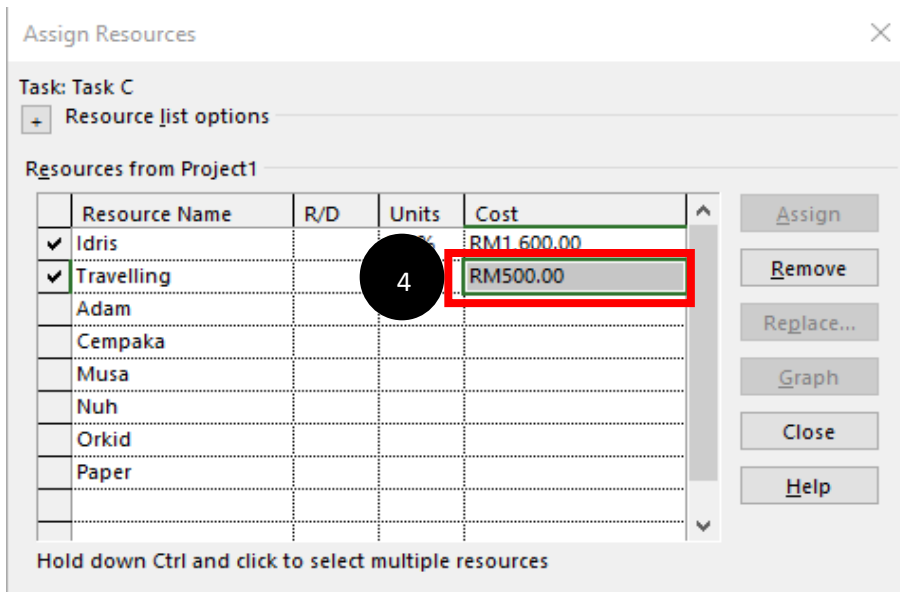
3 Assign Resources

2 Assignments

Resource Pool

Add Resources

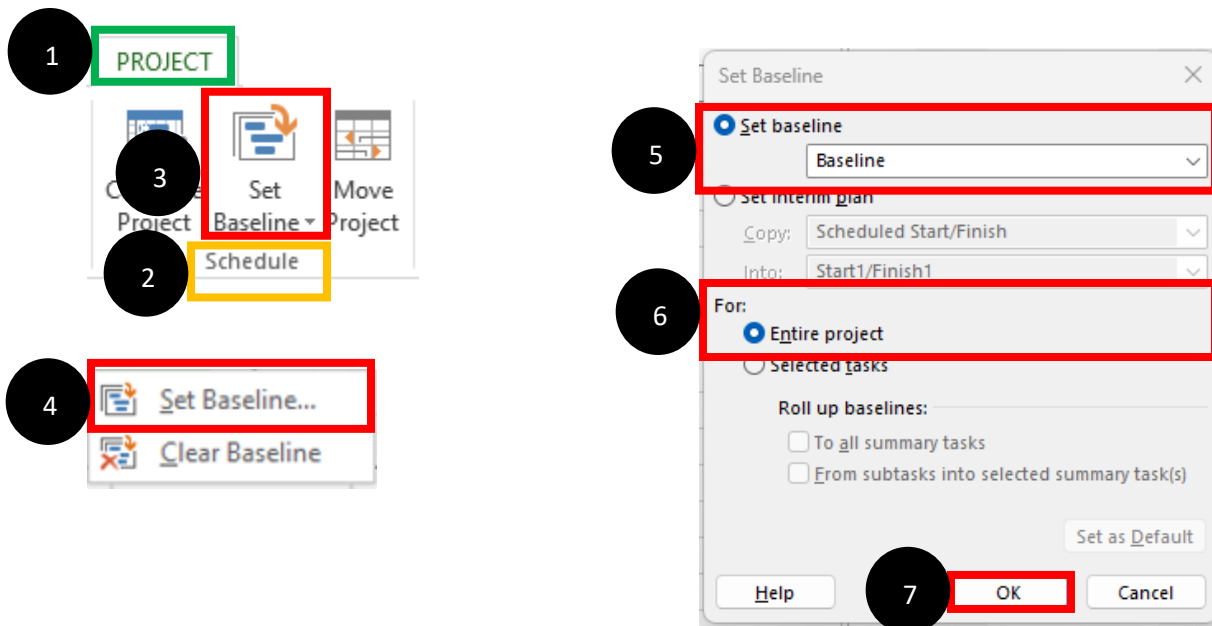
Insert



11. Setting a project baseline:

Project baseline
It can be used to track the original plan and its current state

Project > Schedule > Set Baseline > Set Baseline >



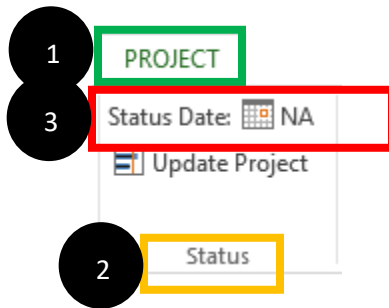
Right clicks on the chart > Show/Hide Bar Styles > Baseline > Select your baseline
Grey bars will appear.



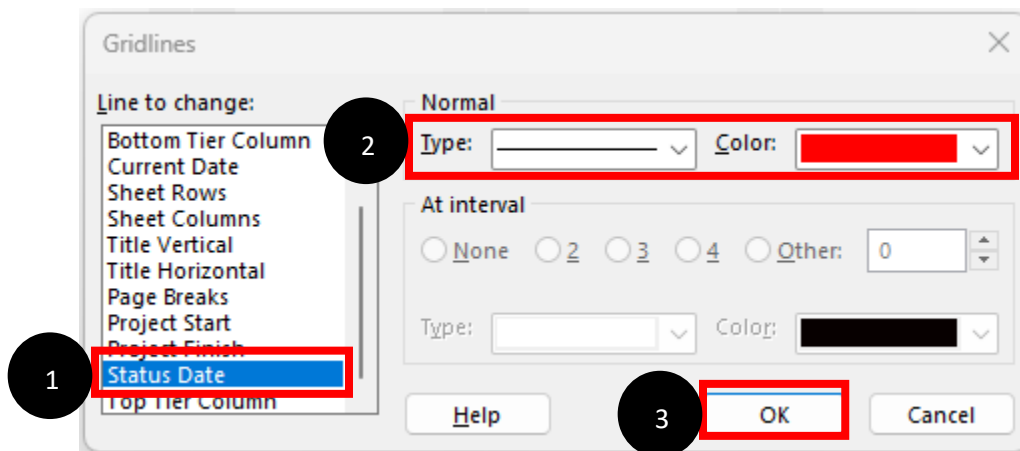
12. Changing the finish date.
Change the duration for Task D from 2 days to 7 days.
The finish date for Task D has changed. The changes are shown in the light blue cells.
The baseline will not change.

★	Phase 2	7 days	Tue 15/10/24	Wed 23/10/24		
★	Task D	7 days	Tue 15/10/24	Wed 23/10/24		

13. Track the status of the project on 16 October 2024
Project > Status > Status Date > Type the status date: 16 October 2024 > OK

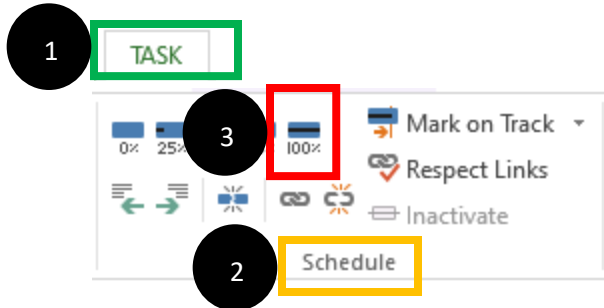
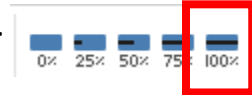


Right click on the Gantt chart > Gridlines >

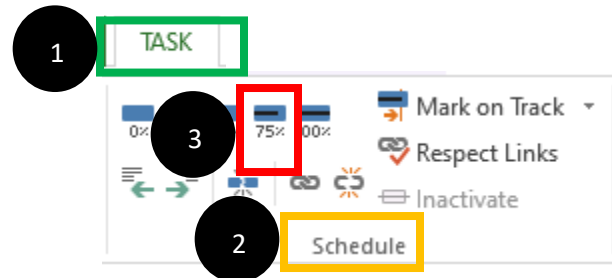
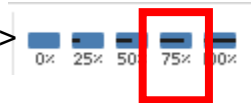




14. Mark all subtask of **Phase 1** as 100% complete.
Highlight all subtask of **Phase 1** > Task > Schedule >

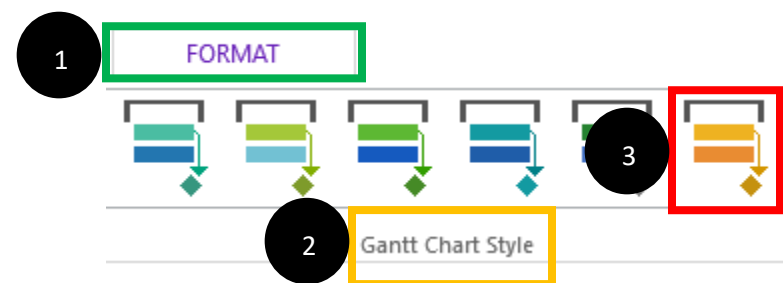


15. Mark all subtask of **Phase 2** as 75% complete.
Highlight all subtask of **Phase 2** > Task > Schedule >



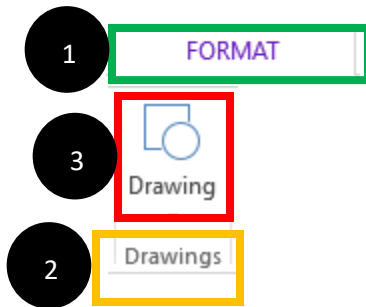
16. Formatting text:
Task > Font> Times New Roman > 12

17. Gantt chart style:
Format > Gantt Chart Style > Apply this style

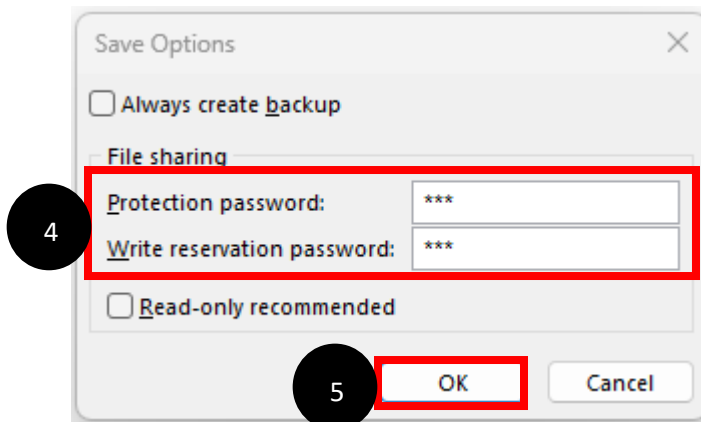
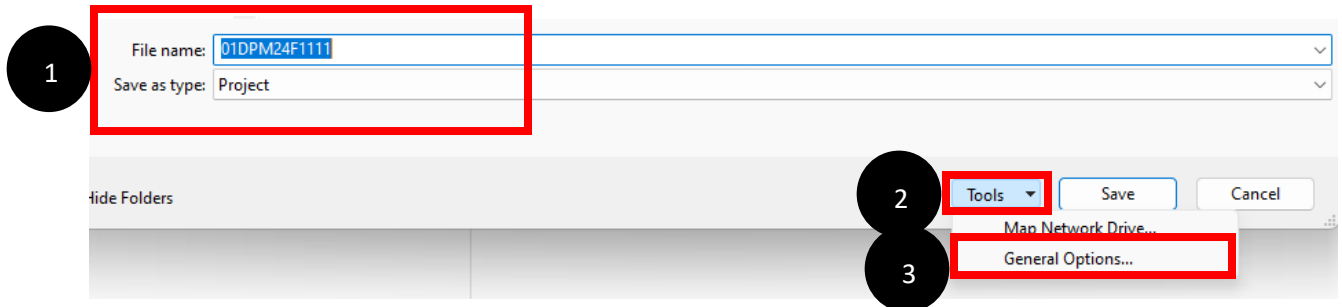




18. Draw the following textbox on the Gantt chart:
Format > Drawings > Drawing > Text Box > Properties > Meeting on 20 October 2024



19. File > Save as > Browse > File Name: *YOUR MATRIC NO MS PROJECT 1* > Save as type: Project > Tools > General Options > Protection Password: **DBC**.





ACTIVITY

- i. Practice using project management features
- ii. Perform task list and relationship features
- iii. Perform resource management features
- iv. Perform Gantt chart views, formatting and printing features
- v. Perform project schedule and progress tracking features

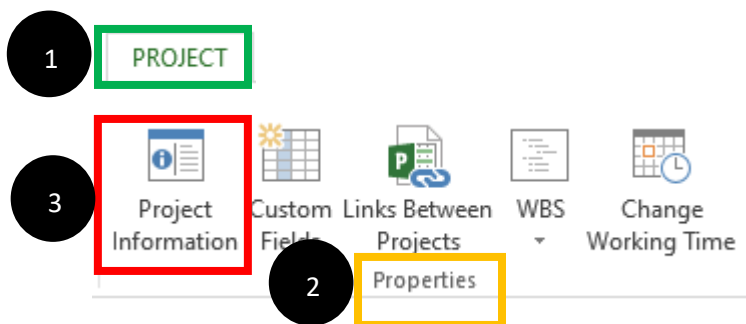
MICROSOFT PROJECT: LAB EXERCISE 2

Follow the instructions below:

1. Create a Gantt Chart for the following project plan.

TASK	START	DURATION	PERSON IN CHARGE	MATERIAL	COST
Task 1	2 December 24	8 days			
Task 1a	2 December 24	4 day	Lily	Paper	RM150
Task 1b	6 December 24	2 days	Rose	Fuel	RM500
Task 1c	9 December 24	2 days	Kiambang		
Task 2	11 December 24	17 days			
Task 2a	11 December 24	6 days	Cempaka		
Task 2b	11 December 24	10 days	Musa		
Task 2c	23 December 24	6 days	Orked		

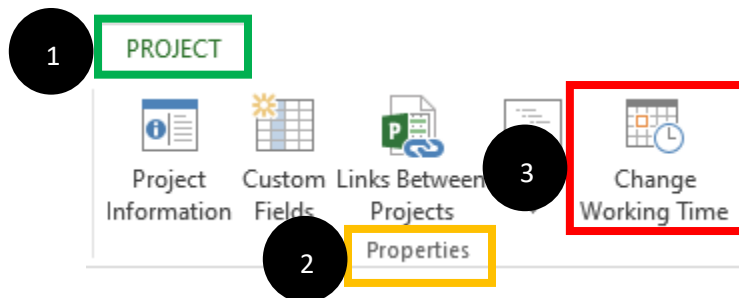
2. Set the start date:
Project > Properties > Project Information >





Start date: Mon 2/12/24 Current date: Mon 26/6/23
Finish date: Mon 30/12/24 Status date: NA
Schedule from: Project Start Date Calendar: Standard
All tasks begin as soon as possible. Priority: 500
Enterprise Custom Fields
Department:
Custom Field Name Value
Help Statistics... OK Cancel

3. Change Saturday as working time
Project > Properties > Change Working Time > Work Weeks > Default > Details

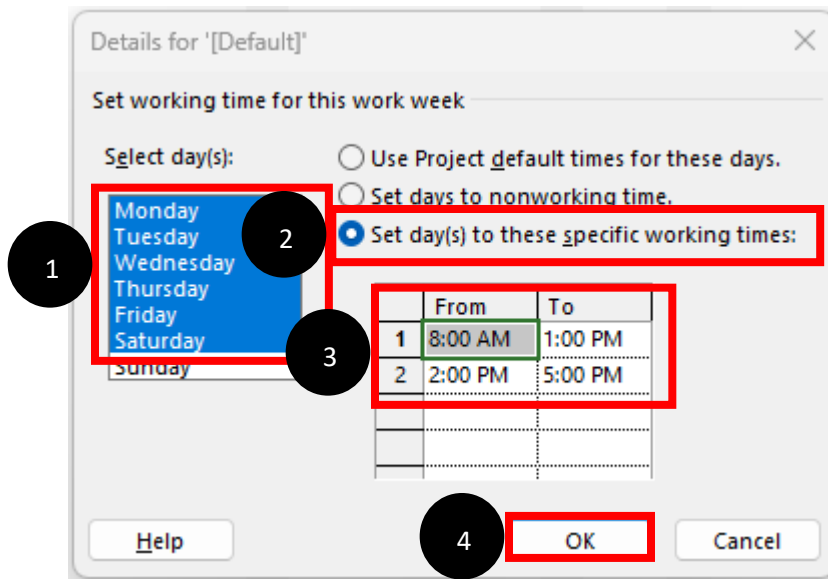


Name	Start	Finish
[Default]	NA	NA

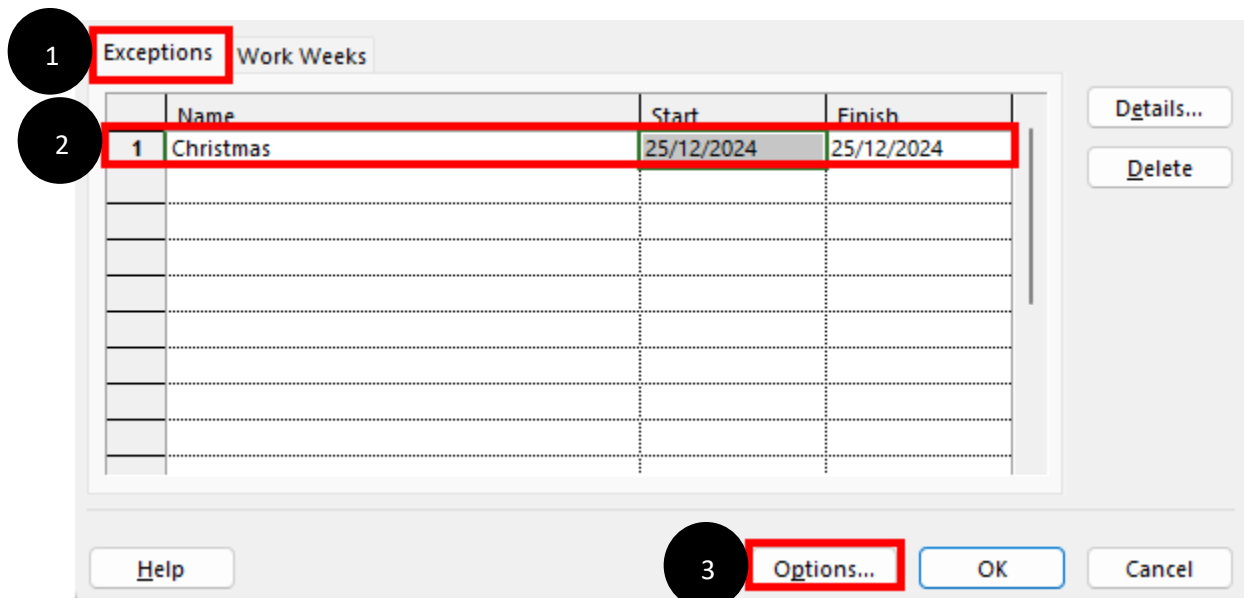
4 Work Weeks
5 [Default] Start NA Finish NA 6 Details...
Delete
Help Options 7 OK Cancel



4. Change the specific working time for Monday until Saturday:
Select Monday until Saturday > Choose Set day(s) to these specific working times > From: 8am – 1pm, From 2pm - 5pm



5. Setting up 25 December 2024 as non-working day since it is Christmas celebration.
Exceptions > Name: Christmas > Start: 25/12/2024, Finish: 25/12/2024 > Options





6. Schedule > Enter the following information > OK

Project Options

General
Display
Schedule
Proofing
Save
Language
Advanced
Customize Ribbon
Quick Access Toolbar
Trust Center

Change options related to scheduling, calendars, and calculations.

Calendar options for this project: Project2

Week starts on: Monday
Fiscal year starts in: January
 Use starting year for FY numbering

Default start time: 8:00 AM
Default end time: 5:00 PM
Hours per day: 8
Hours per week: 48
Days per month: 24

These times are assigned to tasks when you enter a start or finish date without specifying a time. If you change this setting, consider matching the project calendar using the Change Working Time command on the Project tab in the ribbon.

Schedule

Show scheduling messages
Show assignment units as: Percentage

Scheduling options for this project: Project2

New tasks created: Manually Scheduled
Auto scheduled tasks scheduled on: Project Start Date
Duration is entered in: Days
Work is entered in: Hours
Default task type: Fixed Units

New tasks are effort driven
 Autolink inserted or moved tasks
 Split in-progress tasks

Tasks will always honor their constraint dates
 Show that scheduled tasks have estimated durations
 New scheduled tasks have estimated durations

OK Cancel

7. View > Zoom > Timescale: Days

VIEW

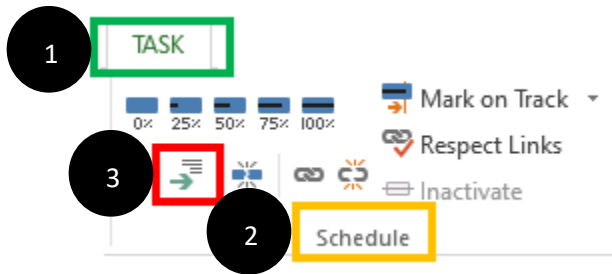
Timescale:
Days

Zoom Entire Selected
Project Tasks

Zoom




8. Key in **Task Name, Start and Duration**
Insert subtask:
Select task > Task > Schedule > Indent Task: Right



9. Create a milestone with duration other than 0.

Milestone

It is used to mark important event.

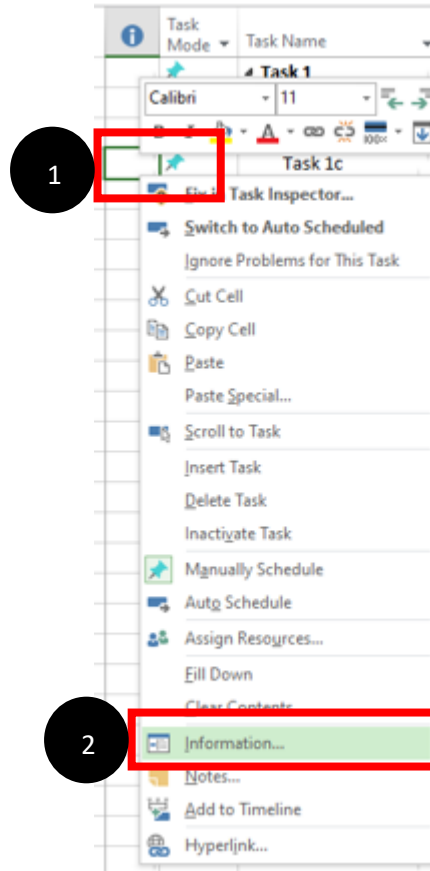
Milestone is represented by a diamond symbol 

Example of milestones are project approval, completion of key deliverables, design approval and the beginning or ending of a project phase.

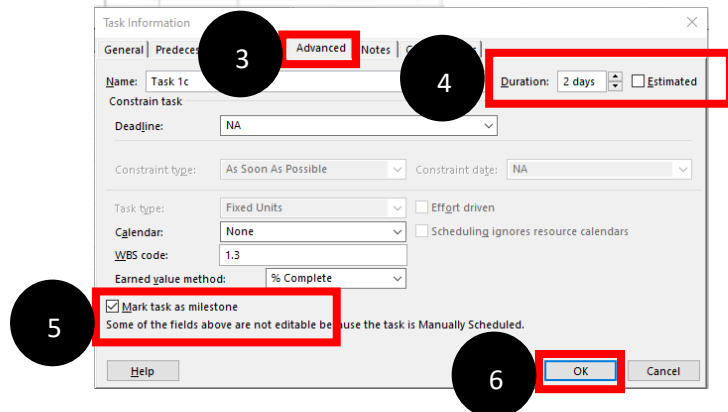
Entering a milestone for Task 1c.



a) Right click on indicator cell >
cell for Task 1c



b) Information >
Advanced > Duration > 2
days > Mark task as
milestone > OK

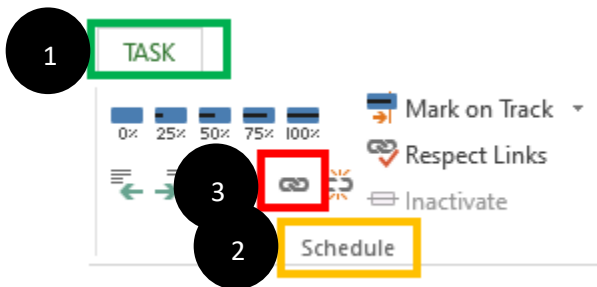


10. Create a milestone with 0 duration.
Click on cell below Task 2c > Task > Insert > Milestone > Rename as Task 2d
Start date: 31 December 2024
Duration: 0 day



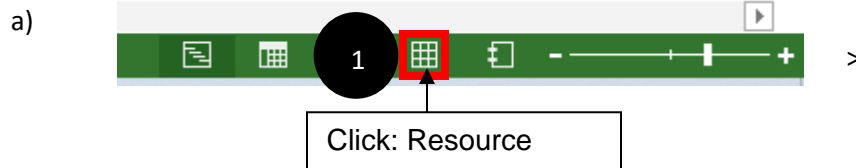
11. Link the selected task and task dependency:

Task 1a	Finish to start
Task 1b	
Task 1c	
Task 2a	Start to start
Task 2b	
Task 2b	Finish to start
Task 2c	
Task 2d	
Task 2d	




Predecessors will automatically appear.

12. Setting up resources

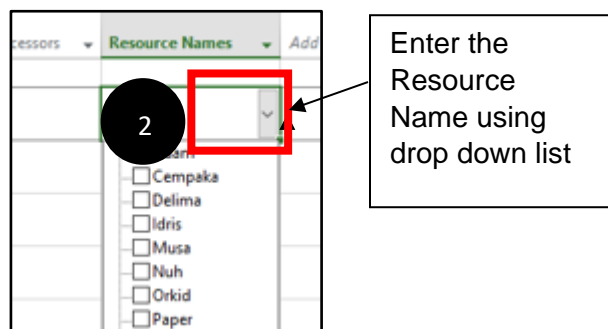
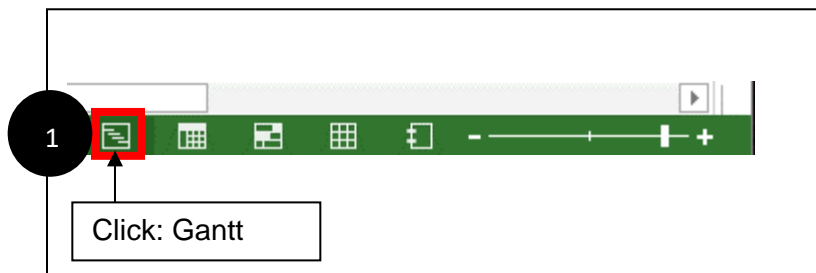




Fill in the resource sheet with the information below:

	Resource Name	Type	Material	Initials	Group	Max.	Std.
	Lily	Work		L		100%	M50.00/hr
	Rose	Work		R		100%	M40.00/hr
	Kiambang	Work		K		100%	M45.00/hr
	Cempaka	Work		C		100%	M55.00/hr
	Musa	Work		M		100%	M70.00/hr
	Orked	Work		O		100%	M75.00/hr
	Paper	Material	Ream	P			RM12.00
	Fuel	Cost		F			

b)





13. Assign resources
Select on Task Name: Task 1a > Resource > Assign Resources > Paper > Unit: 3 reams

Assign Resources

Task: Task 1a

Resource list options

Resources from Project1

Resource Name	R/D	Units	Cost
✓ Lily		100%	RM1,200.00
✓ Paper		3 Ream	M36.00
Cempaka			
Fuel			
Musa			
Orked			
Rose			

Hold down Ctrl and click to select multiple resources

14. Assign resources
Select on Task Name: Task 1b > Resource > Assign Resources > Fuel > Cost: 500

Assign Resources

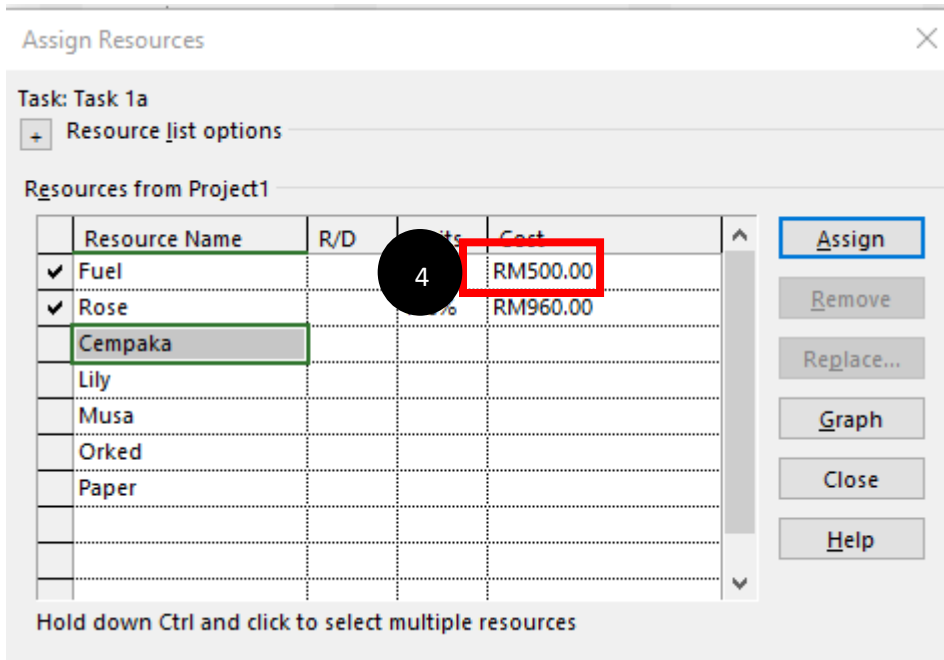
Task: Task 1b

Resource list options

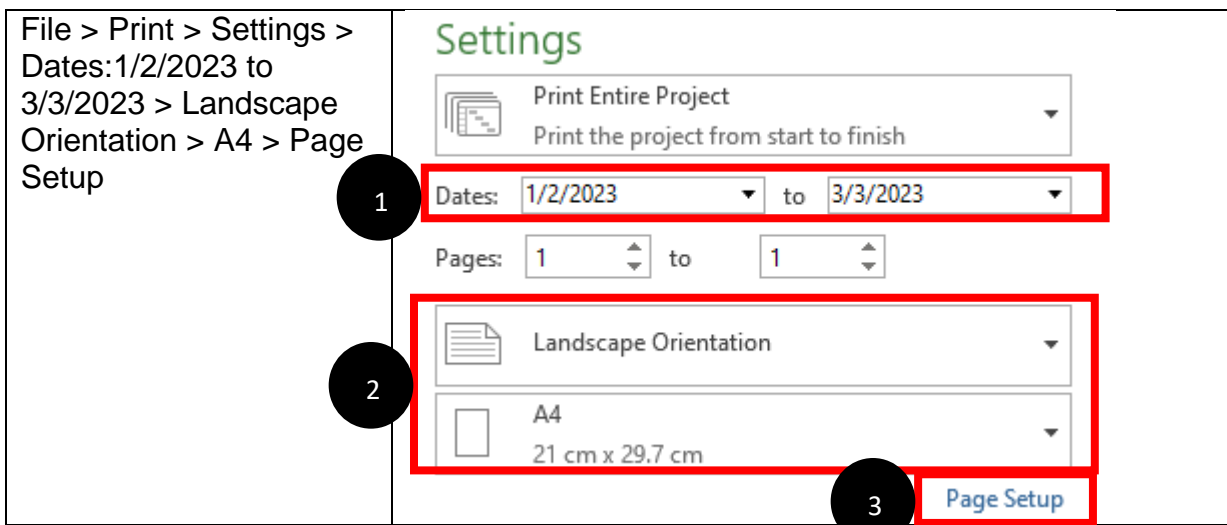
Resources from Project1

Resource Name	R/D	Units	Cost
✓ Fuel		500	

Hold down Ctrl and click to select multiple resources



- File > Save as > Browse > File Name: *YOUR MATRIC NO MS PROJECT 2* > Save as type: Project > Tools > General Options > Protection Password: **DBC**.
- Printing the project plan:





Page > Landscape > Scaling: Fit to 1 page wide by 1 tall > OK > Print > Microsoft Print to PDF

4

Page Setup - Tracking Gantt

Page | Margins | Header | Footer | Legend | View

Orientation

Portrait Landscape

Scaling

Adjust to: 84 % normal size

Fit to: 1 pages wide by 1 tall

Other

Paper Size: A4

First page number: Auto

Print Preview... Options... Print... 5 OK Cancel

17. Perform automatic scheduling

Automatic scheduling

Automatic scheduling is done based on:

- the project start date
- the duration of each task
- the task dependencies
- constraints such as public holidays

Select all task > Task > Tasks > Auto Schedule

1

2

3

TASK

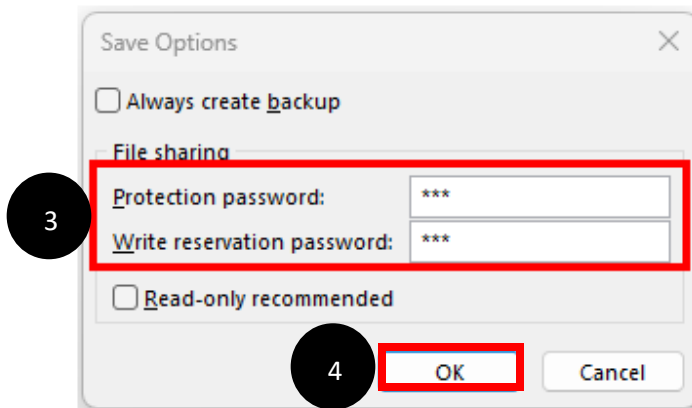
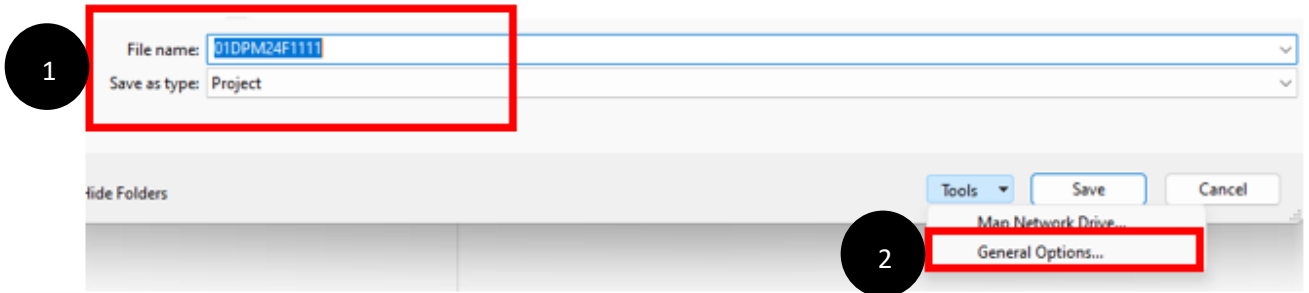
Auto Schedule

Inspect Move Mode

Tasks



18. File > Save as > Browse > File Name: *YOUR MATRIC NO MS PROJECT 2_AUTO SCHEDULE* > Save as type: Project > Tools > General Options > Protection Password: **DBC**.





MICROSOFT PROJECT: KNOWLEDGE CHECK



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- Teacher Shiela. (2020, April 25). *Microsoft Word - Basic Parts*. YouTube. <https://www.youtube.com/watch?v=PqhVJzi6oZQ>

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