Excel Level 1 .2
Formatting & Range Calculations

User Guide

IAA

July 2023

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Contents

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Course Objectives

Tasks covered in this session;

- **Text and Number Formatting**
  - Text formatting and quick short cuts
    - Font, Size, Colour, Borders and Shading
  - Number Formatting
    - Currency, Accounting, No of Dec. Places, Percentage, Dates and Custom Formats

- **Using the Format Painter**

- **Table Styles**
  - Advantages of using Styles, Adding a Style to existing Data
  - Creating your own Style, Clearing a Table Styles
  - Deleting a Table Style

- **Range Formulas and Functions**
  - SUM – MAX – MIN - AVERAGE
  - COUNT – COUNTA - COUNTBLANK

- **Error Messages in functions and formulas**
  - #DIV/O – #N/A – #NAME?
  - #NULL - #REF - #VALUE
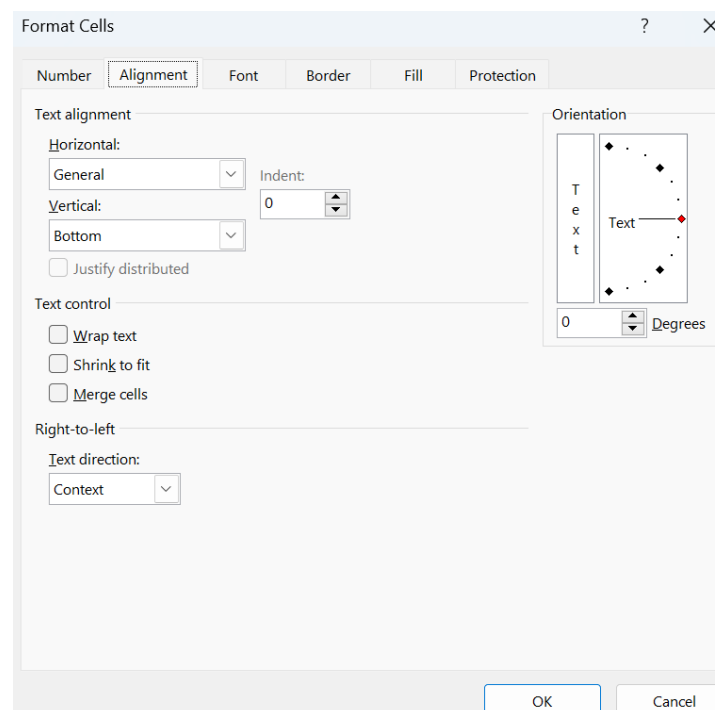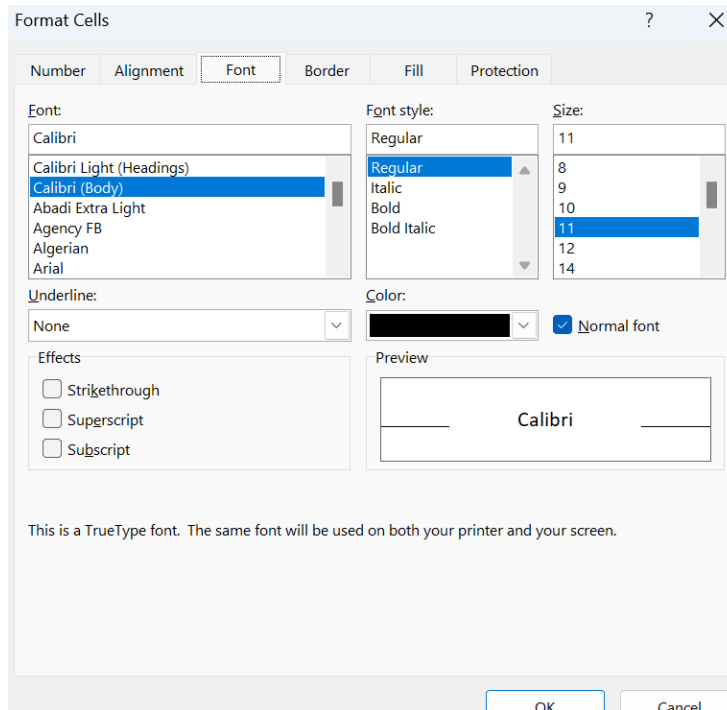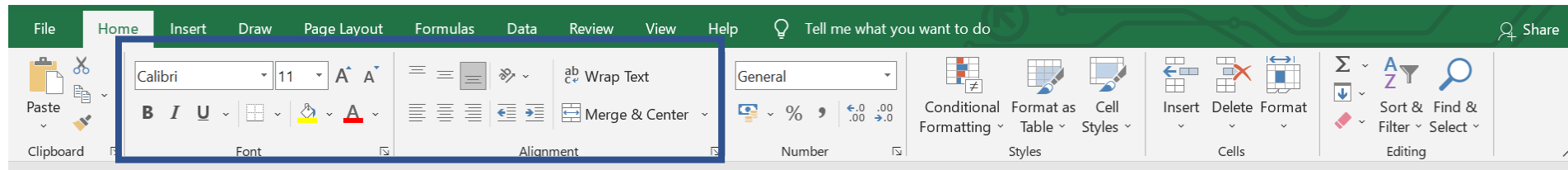 - ##### - CIRC

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- **Sheet Manipulation**
  - New, Delete, Rename, Hide, Unhide,
  - Protect
  - Copy / Move

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Lesson 1

- Cell Formatting

- Borders and Shading

- Cell Alignment

- Number Formatting

- Format Painter

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Cell Formatting

Home Tab – Font & Alignment

Cell Formatting

Borders

Adding Borders to cells creates over managed spreadsheets. Copy and Paste cells with borders will paste the borders as well...
TIP: Use Print Gridlines
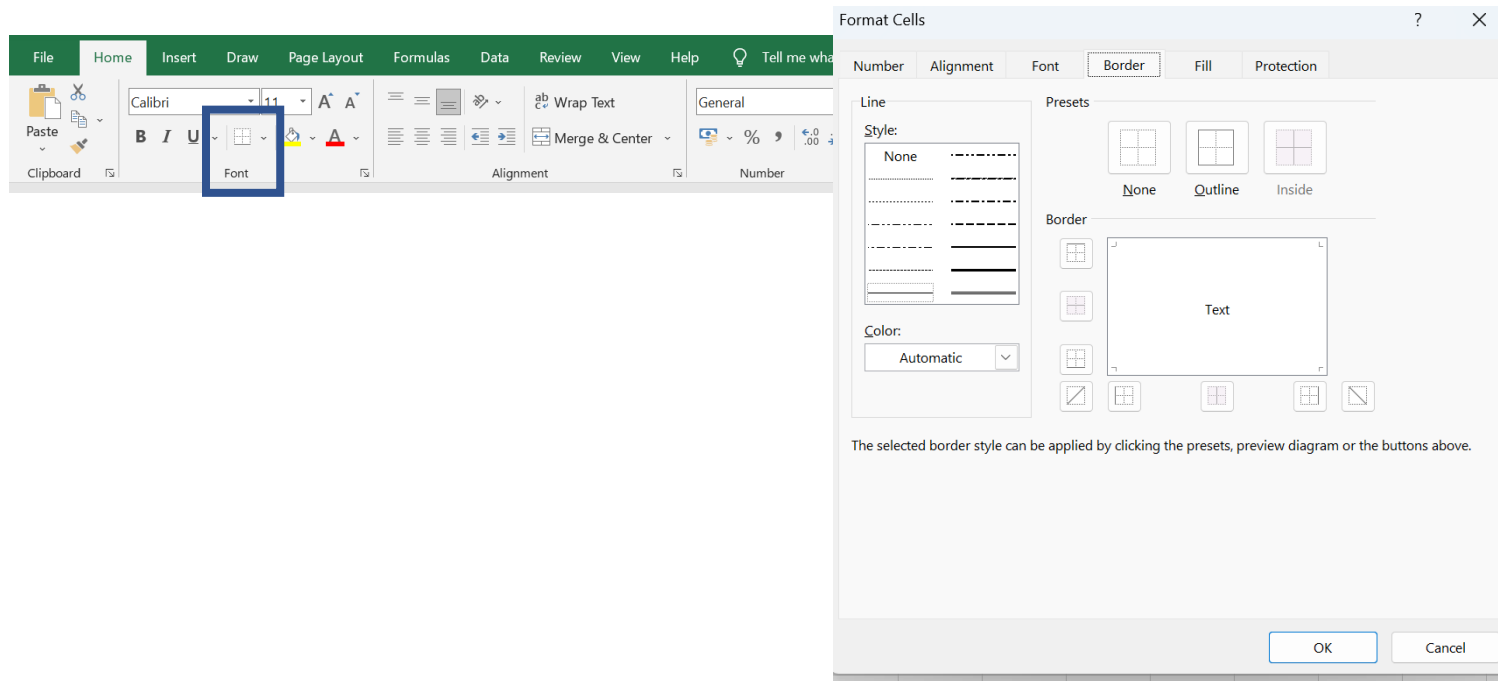
Cell Formatting

Shortcuts

Description	Short cut Key
Display Font Dialog Box	CTRL + 1
Bold	CTRL +B
Italic	CTRL +I
Underline	CTRL + U
Select All Cells	CTRL +A

Number Formatting

Home Tab

Only cells which have values will recognise and display number formatting
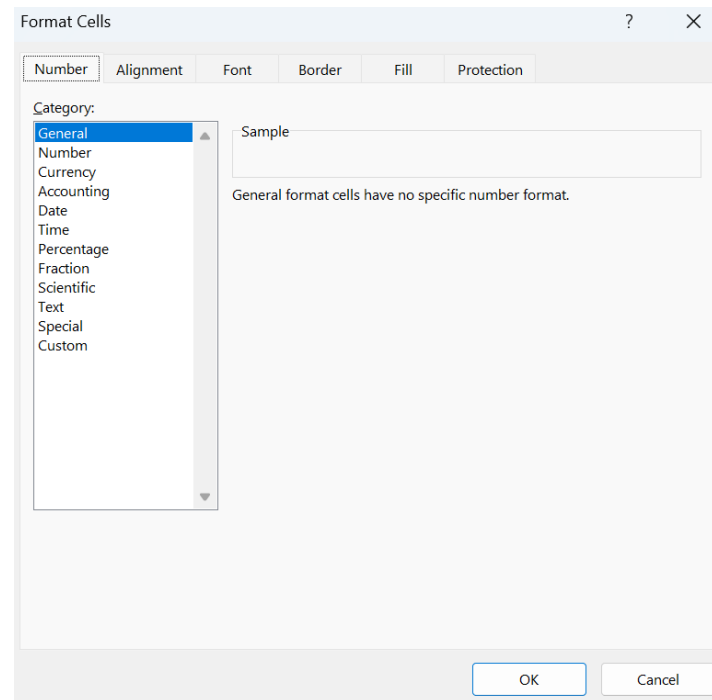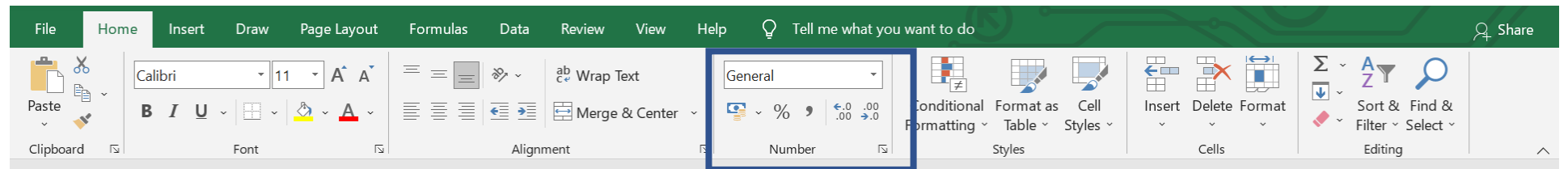
Number Formatting

Shortcuts

Description	Short cut Key
General Format	CTRL + SHIFT + ~
Currency	CTRL + SHIFT + $
Percentage	CTRL + SHIFT + %
Date	CTRL + #
Time	CTRL + SHIFT + @

Lesson 2

- Table Styles

- Use different Style Formats

- Update Data in a Style

- Clear Style

- Save a File
  - Different Save Options
    - Save Read only
    - Save with a Password

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Table Styles

What is a Style?

- A cell style is a defined set of formatting characteristics, such as fonts and font sizes, number formats, cell borders, and cell shading

The Advantages of Styles in Excel

- Styles can save you a lot of time when you need to apply the same format to different parts of your worksheet. The advantage of using styles is that you can apply more than one formatting enhancement to a range of cells in one go. One advantage is that you can update them easily at a later date

Benefits of styles compared with placing directly into formatting text in webpage

- First, it means you don't need to remember the formatting every time we want to use it again.

- Second, if you have used a particular style multiple times throughout a document, and decide you want to make a change to the formatting, you only need to change it in the style sheet instead of making the same change over and over throughout our document.

- It requires a little extra work up front, but can save you a lot of work later on.

Using an Existing Table Style in your Worksheet
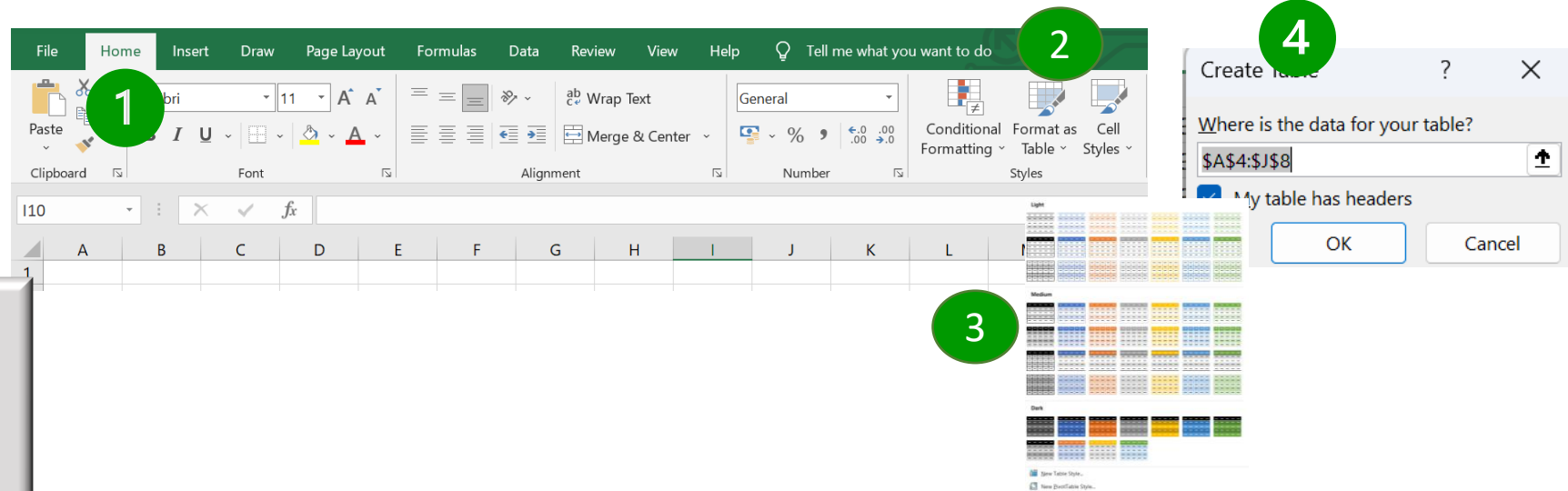
Highlight the Text you wish to create a style on

1. In the Home Tab

2. Under the Styles category select format as a Table

3. Select the Style required

4. A popup dialog box will display. Ensure the current cell range is selected in the pop up, select OK

Select the First Row to be your Style heading
As you insert and delete columns and rows the table style setting change

Name a Style

1. **Click in your Table Style**

2. **In the Table Tools Tab in the**

3. **In the Table Design under the Properties grouping. Click on the Table1 name and type in your new name**

Rules:
Name must be one word only
Name must be unique

Clear a Table Style

Clear a table style

1. Select any cell in the table from which you want to Clear the current table style.

2. expand the Table Styles gallery from the Table Tools > Design tab

3. Click Clear. The table will be displayed in the default table format. You can also select Convert Range to table in the Table Design Tools area of the ribbon. Remember to clear the formatting from the table as well
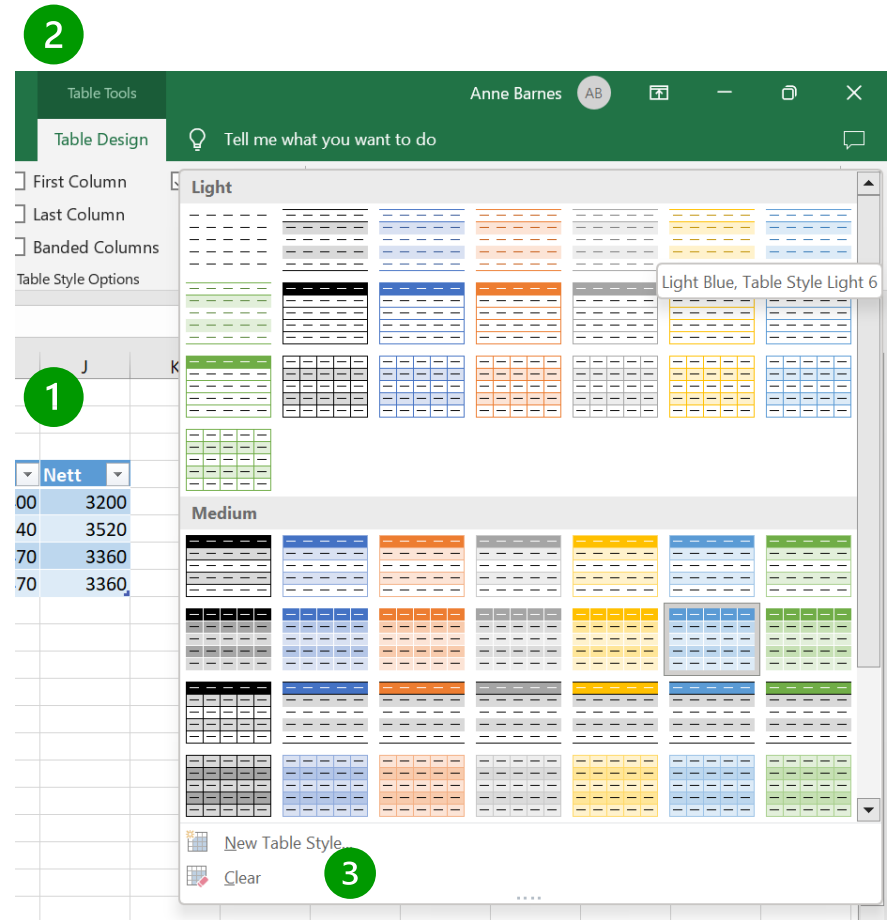
Clearing a Table Style doesn't delete the style it returns the style to its original view

Remove a Table Style – Convert to Range

Convert a Table Style to a Range

1. Select any cell in the table from which you want to remove the current table style.

2. Right mouse click in the Table

3. Select Convert to Range from the Design Tab in the Tools Group

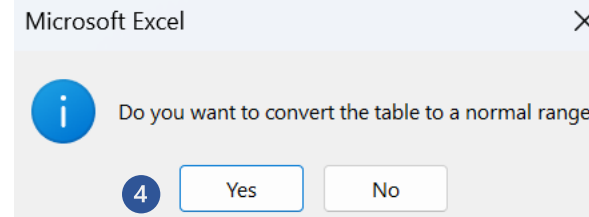4. Excel will ask you to confirm your option, select Yes,

Lesson 3

- Calculations & Range Functions
  - SUM
  - MAX
  - MIN
  - AVERAGE
  - COUNT
  - COUNTA
  - COUNTBLANK

- Error Messages

Data Stats using Range Functions

To be added at the top of the worksheet or another sheet but separate from your input area:

- **Range Functions**

  =Sum(Range) ⟶ =sum(D5:D10) ⟶ totals the cells in the range

  =Average(Range)   = Average(D5:D10)   returns the average value of cells in the range

  =Max(Range)   =Max(D5:D10)   returns the maximum value

  =Min(Range)   =Min(D5:D10)   returns the minimum value

  =Count(Range)   =Count(D5:D10)   counts the numeric cells

  =Counta(Range)   =Counta(D5:D10)   counts all cells with content

  Countblank(Range)   =countblank(D5:D10) counts blank cells

Ranges for Calculations

- **Grouped Together**

  First Cell : Last Cell

- **Individual Cells**

- First Cell, Next Cell, Next Cell

Error Messages

#Name

    Incorrect Function name or Range name

#DIV/0 Error

        Cannot Divide by 0

#N/A Error

    No Value available to create the calculation on. Can be seen when using lookup tables

#Value!

-   Excel displays this error when it finds spaces, characters, or text in a formula where it is expecting a number.

#Null

- This error is usually displayed when <u>cell references</u> are not specified correctly

#Ref

- This error stands for reference error. This error usually comes when a cell is deleted

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- Column width is too narrow

TUTORIAL 3

Using Range Functions

- Select Cell G3
- Type the following formula
- =SUM(G10:G15)
- Copy the formula across to cell K3
- Select Cell G4
- Type in the Following formula
- =AVERAGE(G10:G15)
- Copy the Formula across to K4
- Select Cell G5
- Type the following formula
- =MAX(G10:G15)
- Copy the Formula across to K5

- Select Cell G6
- Type the following formula
- =min(G10:G15)
- Copy the formula across to cell K6
- Select Cell G7
- Type in the Following formula
- =COUNT(G10:G15)

Lesson 4

- Error Messages
- #DIV/O - #N/A - #NAME?
- #NULL - #REF - #VALUE
- ####
- CIRC

Error Messages

Error	What is Means
#DIV/O	Divide Overflow – trying to average a range of cells where the values in those cells are blank
#N/A	This error means **"no value available"** or **"not available."** It indicates that the formula cannot find the value that we suppose it may return.
#NAME?	Function name typed into the spreadsheet is incorrect
#NULL	This error is usually displayed when **cell references** are not specified correctly. We get this error when we do not use the space character appropriately. The space character is called the "intersect operator," which specifies the range that intersects each other at any cell.
#REF	This error stands for reference error. This error usually comes when We accidentally deleted the cell which we referenced in the formula. We cut and paste the referenced cell in different locations.
#VALUE	As we deleted cell B7, then cell C7 shifted left to take the place of B7, and we got a reference error in the formula as we deleted one of the referenced cells of the formula.
	CONTINUED / ...

Error Messages

| Error	What is Means
#####	Column width is too small for the value
CIRC	Circular reference in your formula. You are adding the cell you are working in into the formula

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Lesson 5

- Worksheet
  - Add New
  - Delete
  - Reposition
  - Hide
  - Change Tab Colour
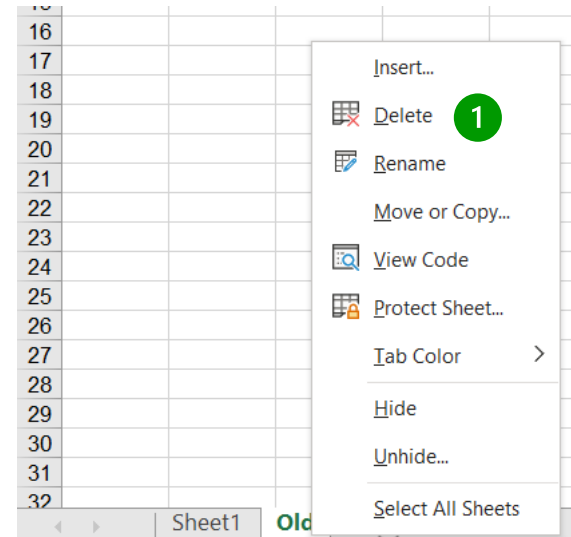
Add a NEW Worksheet

Add NEW

1. Select the + indicator to the right of the last worksheet

2. Type in the NEW worksheet name. Press ENTER to complete
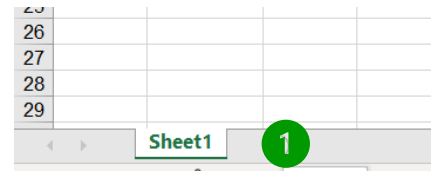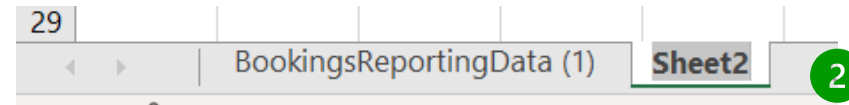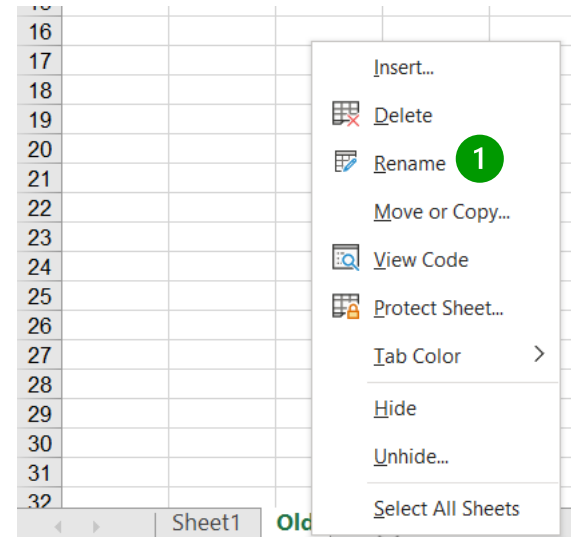
Delete a Worksheet

Delete OLD Worksheet

1. Right mouse click on the sheet to delete
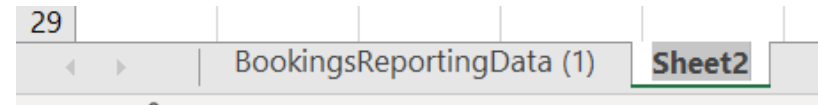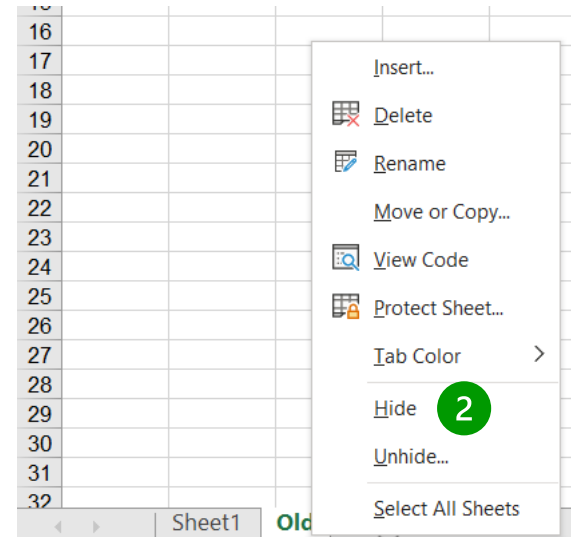
2. Select Delete Sheet from the listing

Rename a Worksheet

1. Right mouse click on the sheet to rename

2. Select Rename Sheet

3. Type the Sheets NEW name by overtyping the existing name. Press ENTER when complete
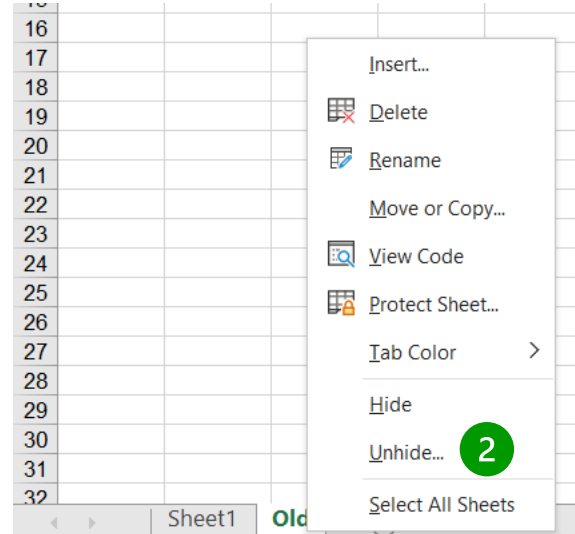
Hide a Sheet a Worksheet

1. Right mouse click on the sheet to hide

2. Select Hide

Un - Hide a Sheet a Worksheet

1. Right mouse click in the sheet environment

2. Select un-Hide

3. A list of hidden sheets will display

4. Select the sheet to un-hide. Click ok
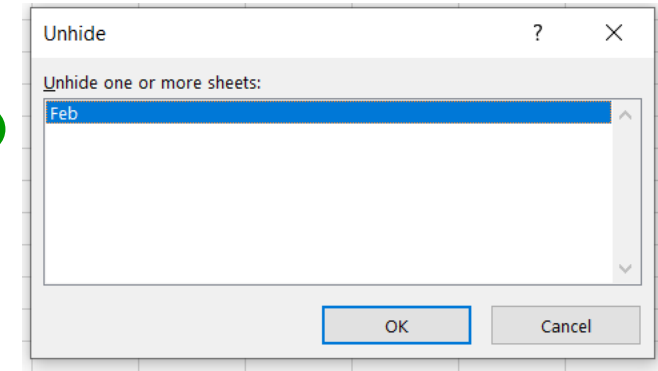
Exercise 5

- Right mouse click on the file called Salaries
- Select Copy
- Select to a new File
- In the newly created file
- Add a New Sheet
- Rename this sheet to Sample Data
- Protect this sheet with a password of 123
  - Protect - locked and unlocked cells
- Add a further sheet and call this Sample Data2
- Hide this Sheet
- Rename this file to Excel Level 1 Day 2 – Sheet Manipulation

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Workbooks

The different workbook types

FORMAT	EXTENSION
Latest version of Excel	.xlsx
Macro enabled	.xlsm
Excel Binary Workbook	.xlsb
Excel Template	.xltx
Excel 2000 – 2013 version	.xls

Latest version will only open in latest application
Macro Enabled files only store macros the standard Excel File doesn't
Binary Workbook used to compress data – ZIP files easier to store and retrieve
Template files are read only
Excel older version files can be opened in later versions. Remember none of the new features will be available in an older version so don't forget to change the File compatibility to the latest version. Select File Infor and update to latest versions

Worksheets

Manipulate Sheets

Reposition

- Click on the Sheet Name and Drag to New position

New

- Click on the +

Rename

- Right mouse click on the Sheet name and type in your new name

Delete

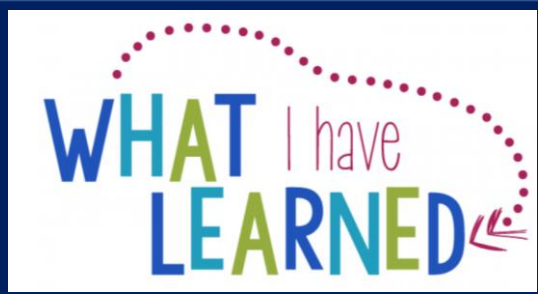- Right mouse click on the Sheet name and select Delete

Hide

- Right mouse click on the Sheet name and select Hide

Unhide

- Right mouse click on any sheet name and select Unhide. Excel will list the hidden sheets; Click on the sheet you wish to Unhide

Course Recap

Tasks covered in this session;

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Thank you for attending our training session
Questions

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