CTRL+T🡪 Table. Just need to select first cell not required to select whole cell.

CTRL+E 🡪 Flash fill. Understand the pattern and fill the values.

Text to column-> If we have some data with comma separated value. Then we can separate them in different column. To do this 🡪 Go to Data Tab->Text to column-> Here Delimited will be selected we need to click on next-> Need to select the delimiters and click on next-> Give the destination column -> Finish.

We can also chose Fixed width and using cursor we can select the portion we need to separate.

Data Validation: Which means when you enter a value which it the out of the given range or format we will get an error. To do this 🡪 Select the cells -> Go to Data Tab-> Data Validation in data tool -> Fill the format and other details -> Ok.

If we do for the list then we can give the allowed value in comma separated in the source field then we will get a tab like button to select the value. There we can also chose the error message.

Data Connector helps to collect data from different platform, To do this need to navigate to Data tab there we will get multiple options like collecting data from web, etc.

To gather data from web 🡪 From web-> paste url-> Load-> Mouse over to right side panel there query and connection and table name will be visible when mouse over it table will be showed click on 3 dot -> Load to-> Table->Ok.

To gather data from mysql server -> we need to install ODBC driver (Open Database Connectivity). Need to add MySql ODBC Unicode driver from drivers to User DSN -> Click on add-> fill the details of the database->ok

Now in Excel -> Click on other sources-> From ODBC -> Select data source name (DSN) -> Ok-> Find table ->Load

We can create data bar which will show display bar in the cell to do this -> select the column-> Conditional formatting -> Data bar -> Select the style.

We can also sort based the color to do this select the cells-> Go to data tab -> Sort-> Fill details -> Ok

Same we can apply multiple sort in the same column by clicking on the add level.

To apply filter use CTRL+Shift+N+L.

To select blank rows etc. -> CTRL+G -> Special-> Provide input and press ok.

To fill the blank cell with the value provided in the next cells value need to select the empty cells and give reference of the just next cell and CTRL+Enter. In all selected cell will be filled with the just next cell value. Ex- E6, E9 cells are empty in that case we can select the these 2 cells and enter “=E7” in E6 and CTRL+Enter in E9 E10 value will be filled and E6 will get E7.

We can also fill the average value in the empty cell.

To Delete duplicate select the table or select only one cell -> Go to Data tab-> Remove duplicates -> Ok.

To Trim white spaces use following function -> =TRIM(CELL NO).

To combine two value use cell no & cell no & cell no 🡪 Here 3 given cell numbers will be filled with the values.

Important functions in Excel:

1. \*\*CONCATENATE (or CONCAT)\*\*:

- \*\*Purpose\*\*: Combines multiple strings into one.

- \*\*Usage\*\*: `=CONCATENATE(text1, text2, ...)` or `=CONCAT(text1, text2, ...)`

- \*\*Example\*\*: `=CONCATENATE(A1, " ", B1)` combines values in A1 and B1 with a space.

2. \*\*LOWER\*\*:

- \*\*Purpose\*\*: Converts all characters in a text string to lowercase.

- \*\*Usage\*\*: `=LOWER(text)`

- \*\*Example\*\*: `=LOWER(A1)` changes "Hello" to "hello".

3. \*\*UPPER\*\*:

- \*\*Purpose\*\*: Converts all characters in a text string to uppercase.

- \*\*Usage\*\*: `=UPPER(text)`

- \*\*Example\*\*: `=UPPER(A1)` changes "Hello" to "HELLO".

4. \*\*PROPER\*\*:

- \*\*Purpose\*\*: Capitalizes the first letter of each word in a text string.

- \*\*Usage\*\*: `=PROPER(text)`

- \*\*Example\*\*: `=PROPER(A1)` changes "hello world" to "Hello World".

5. \*\*LEN\*\*:

- \*\*Purpose\*\*: Returns the number of characters in a text string.

- \*\*Usage\*\*: `=LEN(text)`

- \*\*Example\*\*: `=LEN(A1)` returns the length of the string in A1.

6. \*\*LEFT\*\*:

- \*\*Purpose\*\*: Extracts a specified number of characters from the start of a text string.

- \*\*Usage\*\*: `=LEFT(text, num\_chars)`

- \*\*Example\*\*: `=LEFT(A1, 3)` returns the first 3 characters of the string in A1.

7. \*\*RIGHT\*\*:

- \*\*Purpose\*\*: Extracts a specified number of characters from the end of a text string.

- \*\*Usage\*\*: `=RIGHT(text, num\_chars)`

- \*\*Example\*\*: `=RIGHT(A1, 2)` returns the last 2 characters of the string in A1.

8. \*\*MID\*\*:

- \*\*Purpose\*\*: Extracts a substring from a text string, starting at a specified position.

- \*\*Usage\*\*: `=MID(text, start\_num, num\_chars)`

- \*\*Example\*\*: `=MID(A1, 2, 3)` returns 3 characters starting from the second character of the string in A1.

**FIND Function**

* **Purpose**: Locates a substring in a text string.
* **Syntax**: =FIND(find\_text, within\_text, [start\_num])
* **Example**: =FIND("o", "Hello World") returns 5 (position of "o").
* **Notes**:
  + Case-sensitive.
  + Returns #VALUE! if not found.

**SEARCH Function**

* **Purpose**: Finds a substring within a text string, ignoring case.
* **Syntax**: =SEARCH(find\_text, within\_text, [start\_num])
* **Example**: =SEARCH("o", "Hello World") returns 5 (position of "o").
* **Notes**:
  + Case-insensitive.
  + Returns #VALUE! if not found.

**REPLACE Function**

* **Purpose**: Replaces part of a text string with another text string.
* **Syntax**: =REPLACE(old\_text, start\_num, num\_chars, new\_text)
* **Example**: =REPLACE("Hello World", 7, 5, "Excel") changes "World" to "Excel", resulting in "Hello Excel".
* **Notes**:
  + **old\_text** is the original string.
  + **start\_num** specifies the starting position.
  + **num\_chars** is the number of characters to replace

**SUBSTITUTE Function**

* **Purpose**: Replaces specific occurrences of a substring within a text string.
* **Syntax**: =SUBSTITUTE(text, old\_text, new\_text, [instance\_num])
* **Example**: =SUBSTITUTE("Hello World", "o", "a") changes "Hello World" to "Hella Warld".
* **Notes**:
  + Replaces all occurrences by default.
  + **instance\_num** (optional) specifies which occurrence to replace.

**IF Function**

* **Purpose**: Performs a logical test and returns one value for a TRUE result and another for a FALSE result.
* **Syntax**: =IF(logical\_test, value\_if\_true, value\_if\_false)
* **Example**: =IF(A1 > 10, "Above 10", "10 or below")
* **Notes**:
  + You can nest multiple IF functions for complex conditions.

In excel we can get true and false by applying the condition in a cell need to add = before the condition.

**AND Function**

* **Purpose**: Checks multiple conditions and returns TRUE if all conditions are TRUE; otherwise, it returns FALSE.
* **Syntax**: =AND(condition1, condition2, ...)
* **Example**: =AND(A1 > 10, B1 < 5) returns TRUE if A1 is greater than 10 and B1 is less than 5.
* **Notes**: Often used with the **IF** function for multiple criteria.
* **Ex**: =IF(AND(B2="Grocery",E2="Cash"),"Included","Excluded")

**OR Function**

* **Purpose**: Checks multiple conditions and returns TRUE if at least one condition is TRUE; otherwise, it returns FALSE.
* **Syntax**: =OR(condition1, condition2, ...)
* **Example**: =OR(A1 > 10, B1 < 5) returns TRUE if either A1 is greater than 10 or B1 is less than 5.
* **Notes**: Commonly used with the **IF** function for alternative criteria.

To Get day =NOW() after that go to cell formatting. Chose custom and paste DDDD in the type.

In formula we can also select a column without giving the cell numbers. Ex. =SUM(D:D). Here Only D:D passed.

How to use xlookup in another xlookup?

Power query editor is used to perform transform, group by, split, remove and many operations. The plus point is the performed action is taken on data is listed to right side console.

To Replace value -> Select column -> Find replace value in transform section -> Put details and ok.

In Power query editor we can change data type, split, remove rows, group by🡪 all are available in Home tab.

In Transform tab we can do many calculation in existing rows like fill, split, statistics, date time.

In add column tab we can do conditional column, add custom column etc.

If we take reference of folder to transform data if the same kind of data in every file we can combine them there will be a button like structure next to content table header by clicking this we can combine this. Once we Load this data if we do changes like delete any file add another file same we can combine in data tab and refresh then the same will be updated in the sheet.

Using Data modeling we can see the relation between sheets in same file. To do this we have to enable Power pivot for excel -> file-> Options -> Add-ins-> manage-> comadd in and go-> Micorsoft power pivot for excel -> ok then another tab will be there in excel called Power pivot click on manage -> Diagram view.

To add file in power pivot -> Get external data -> From other source -> Excel -> browse -> add first row as header and next .

Or we can insert all sheets for transformation we can select add first row as header next to the first column and load to -> tick on open in power pivot there we can drag lines to show relationships.

To create buttons -> Select the shape-> right click on this -> Link -> Give reference of the sheet and ok.

We can use macros to do same formatting in the same data. For this we have to create it. To create -> Developer -> Record macros -> Now do all formatting related task -> Stop macros and save it.

To run this macros in different page -> macros -> select macros name and run.

Slicer can be used to filter the data -> to do it -> Select the header -> insert -> slicer -> select the column. Then the slicer will be there we can use these button to get the data.