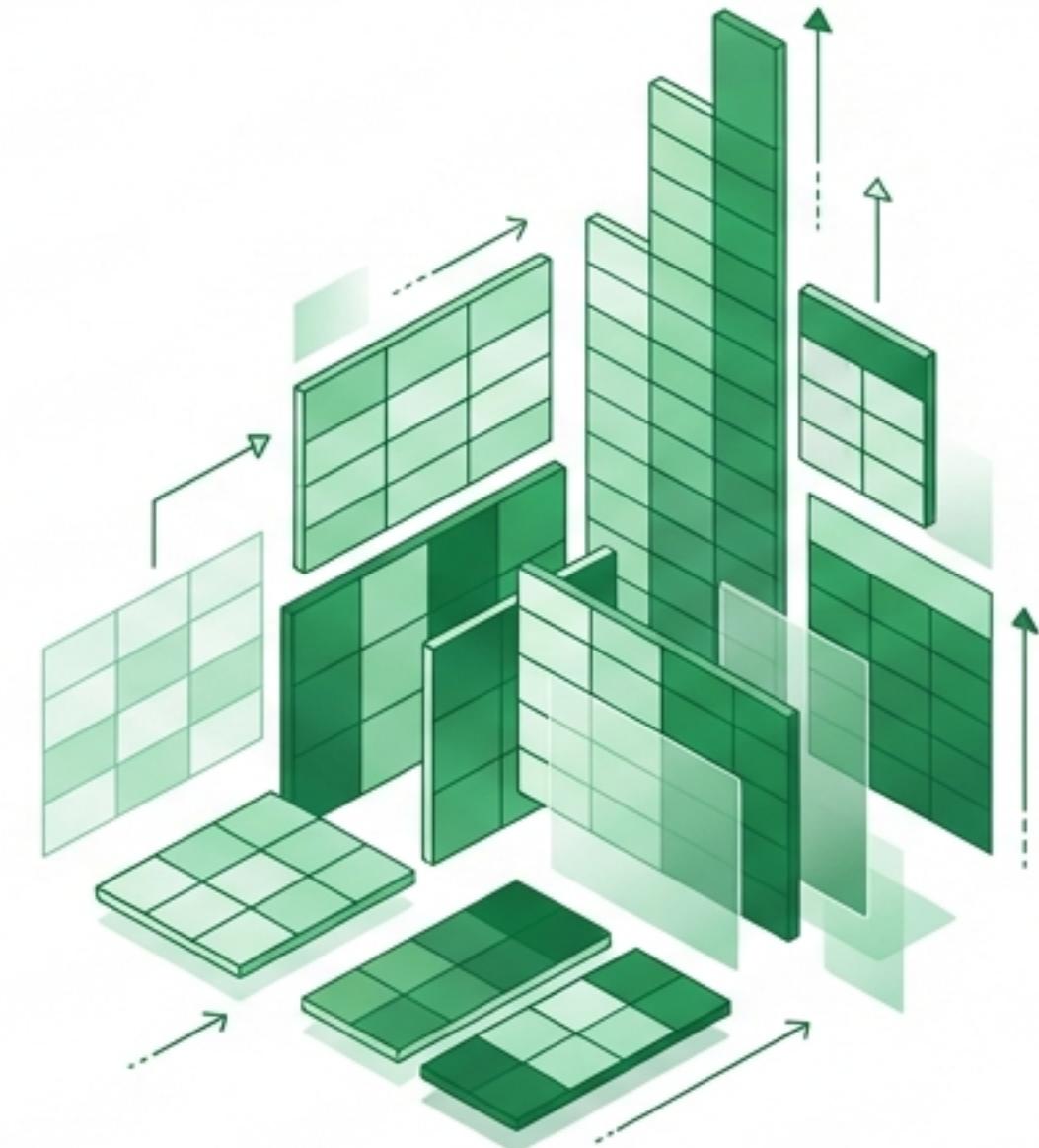


# Mastering Microsoft Excel: Complete Guide

## Microsoft Excel सम्पूर्ण गाइड

From Basics to Advanced Formulas & Shortcuts.

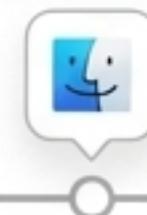
MS Excel एक Spreadsheet program है, जिसे Data Management, Calculation, Analysis, और Visualization के लिए extensively use किया जाता है।



VisiCalc  
(First Spreadsheet)



Lotus 1-2-3  
(MS DOS)



1985: MS Excel  
(Mac OS)



1987: MS Excel  
(Windows OS)



**Current:**  
Excel 2021 & 365

# Understanding the Workbook and File Types



Version	Extension	Details
2003 & below	.xls	Old Standard
2007 & above	.xlsx	Standard XML Format
Macro-Enabled	.xlsm	Supports Automation



Workbook Excel के सबसे important components में से एक है, क्योंकि ये आपकी सारी Worksheets को एक ही जगह पर organize और manage करती है।

Defaults: 2003-2013 (3 Sheets) | 2016-2021 (1 Sheet)

# Anatomy of the Interface (Excel Interface)

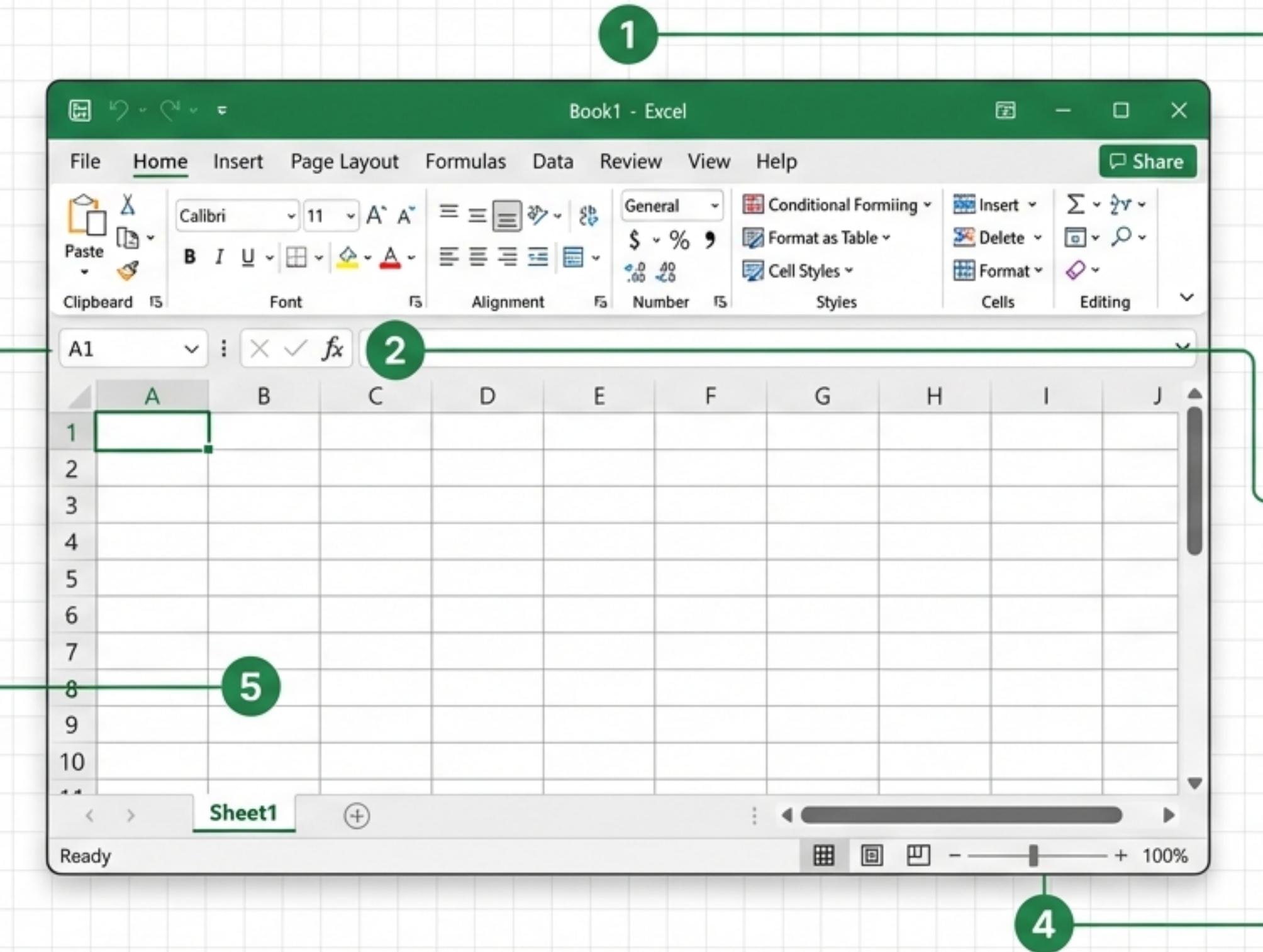
## Name Box

Displays Address  
(e.g., A1)

3

## Gridlines

Horizontal और Vertical  
lines जो cells को  
visually अलग करती हैं।



## Ribbon/Menu Bar

Ctrl + F1 दबाकर Ribbon  
bar को Show/Hide कर  
सकते हैं।

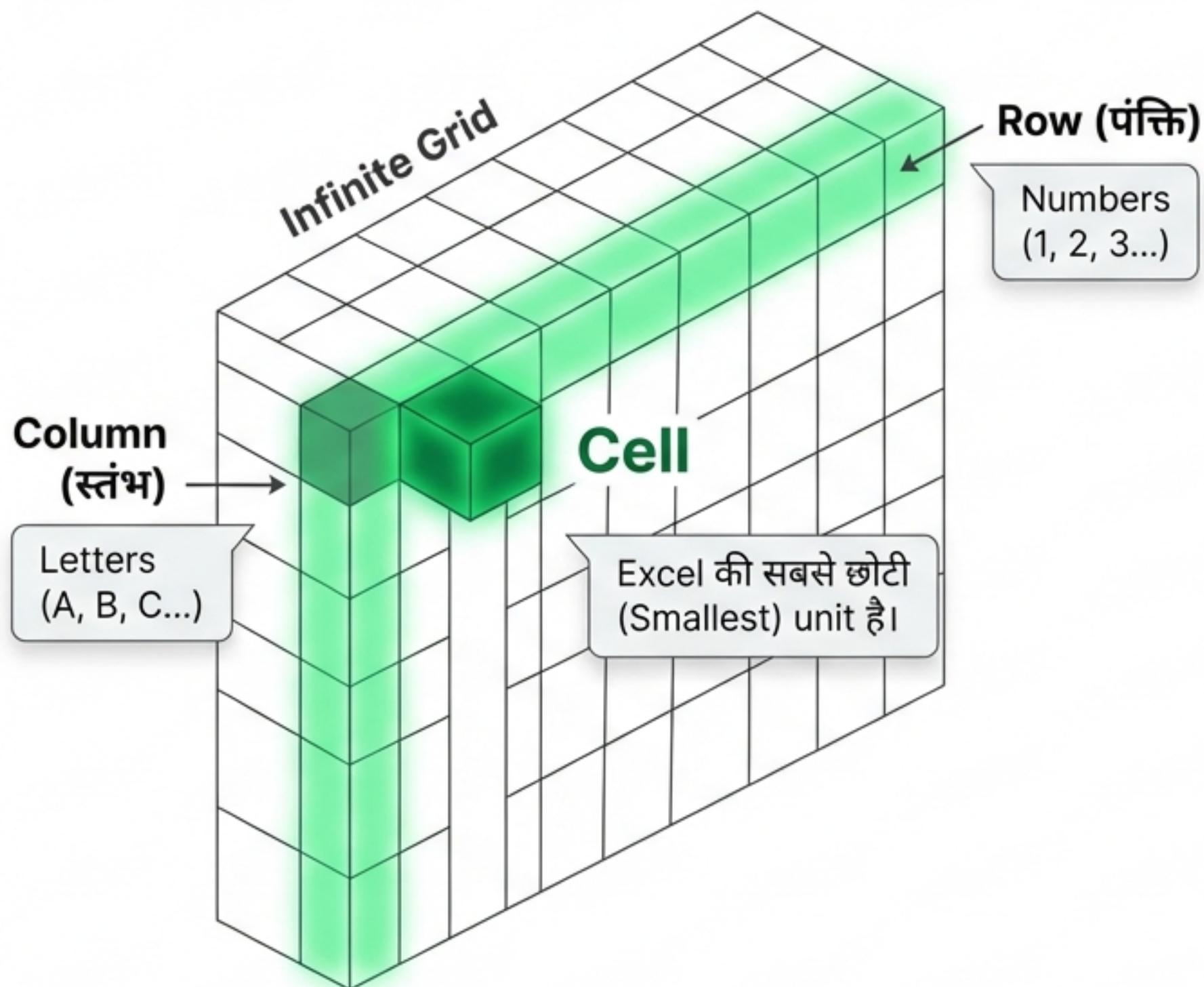
## Formula Bar

Active Cell में जो Text  
या Formula इनपुट करते  
हैं, वो यहाँ दिखता है।

## Status Bar

Zoom Control  
(Min 10% - Max 400%)

# The Grid Structure: Rows, Columns, and Cells



## Technical Limits

**1,048,576**

Total Rows

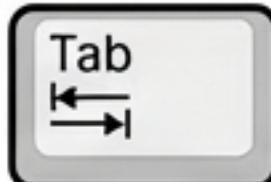
**16,384**

Total Columns - Ends at XFD

- Cell Character Limit: 32,767 characters
- Row Height: Max 409 points
- Column Width: Max 255 characters

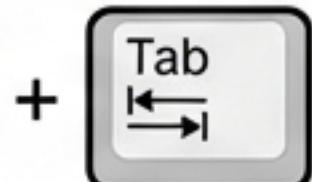
# Navigation and Selection (Move & Select)

## Keyboard Navigation



### Move Right (Next Cell)

Move Right (Next Cell)



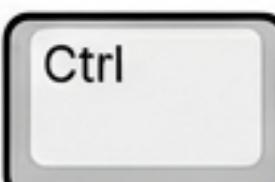
### Move Left

Move Left



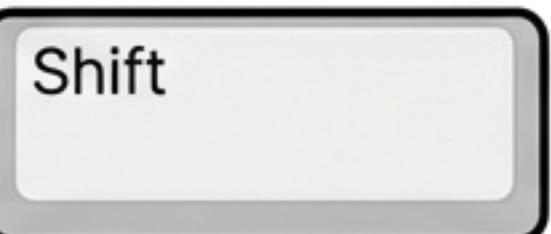
### Move Down

Move Down



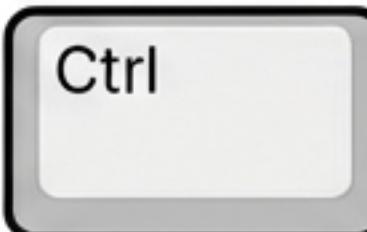
Move to Cell A1 (Workbook के first cell में जाने के लिए)

## Selection Mastery



### Continuous Selection

लगातार Cells को select करने के लिए।



### Multiple Selection

अलग-अलग Cells को select करने के लिए।

## Pro Tips

- Entire Row: Shift + Spacebar
- Entire Column: Ctrl + Spacebar
- Entire Worksheet: Ctrl + A

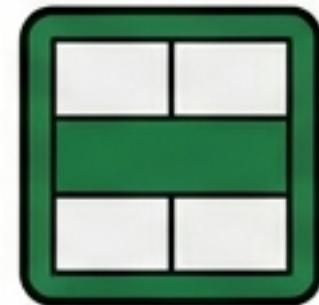
# Formatting & The Power of Paste Special



Text Left,  
Numbers Right.



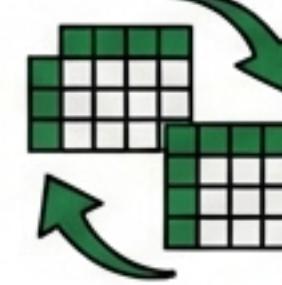
Fit multiple  
lines.



Combine cells.



Values Only  
(केवल Calculated  
values पेस्ट करने के लिए)



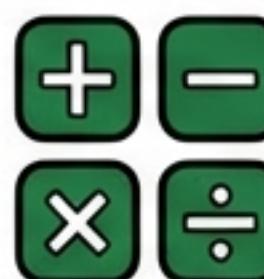
Transpose  
(Rows को Columns  
में बदलना)



Formats Only

## Paste Special

Excel में एक महत्वपूर्ण  
feature है...



Operations  
Add/Multiply

# Mathematical & Statistical Functions

**Golden Rule:** Formula must start with =

किसी भी Formula का उपयोग करने से पहले (=) लगाना अनिवार्य है।

## SUM

=SUM(range)

Range के सभी सेलों की value को जोड़ने के लिए।

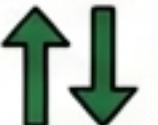


## MAX / MIN

=MAX(range)

=MIN(range)

Highest or Lowest value find करना।



## AVERAGE

=AVERAGE(range)

Calculates the mean value.



## COUNT vs COUNTA

=COUNT(range)

Numbers only

=COUNTA(range)

All filled cells - Text & Numbers



## POWER

=POWER(Number, Power)



## MOD

=MOD(Number, Divisor)

Returns the Remainder (शेषफल).



# Text & Logical Functions

## Text Manipulation

### UPPER/LOWER

ab → AX

text → TEXT

UPPER text string को बड़े अक्षरों में बदल देता है।

### TRIM



Extra spaces को remove करने के लिए।

### CONCATENATE

Cell A + Cell B = Cell AB

=CONCATENATE(text1, text2)

### LEN

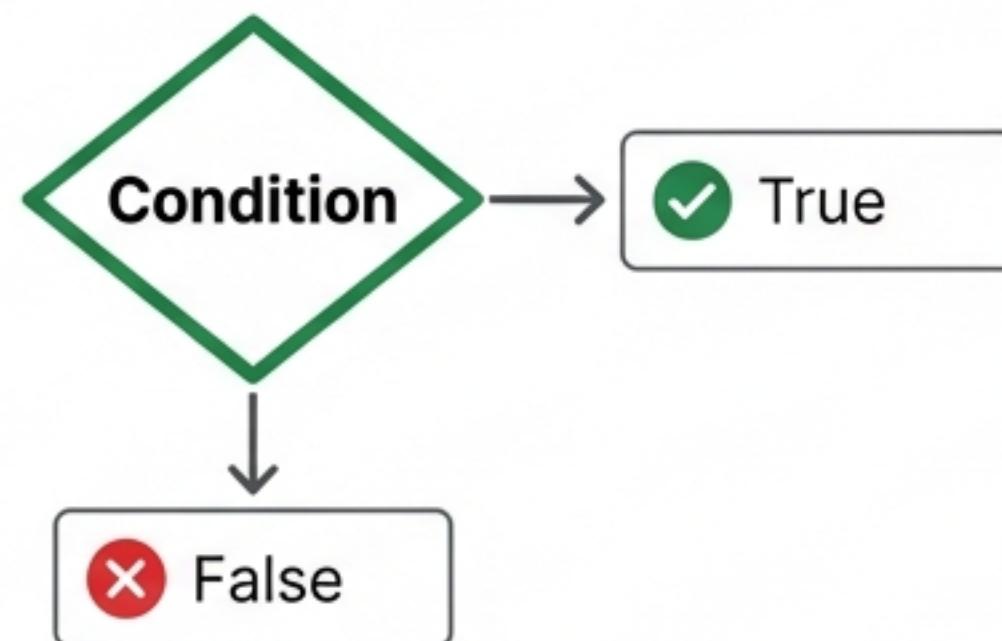


=LEN(text)

Counts characters.

## Logic (Decision Making)

Condition को check करने के लिए use किया जाता है।



=IF(Condition, "True\_Val", "False\_Val")

=IF(Marks>33, "Pass", "FAIL")

# Date, Time & Financial Functions



**Current Date:** Ctrl + ;



**Current Time:** Ctrl + Shift + ;

**NOW()**

Returns Current Date + Time.

**TODAY()**

Returns only today's date.

**DAY/MONTH/YEAR**

Extracts specific parts.

## PMT Function (Loan EMI Calculation)

### Syntax

=PMT(rate, nper, pv)



**Rate**

Interest Rate (Monthly)



**Nper**

Total number of payments

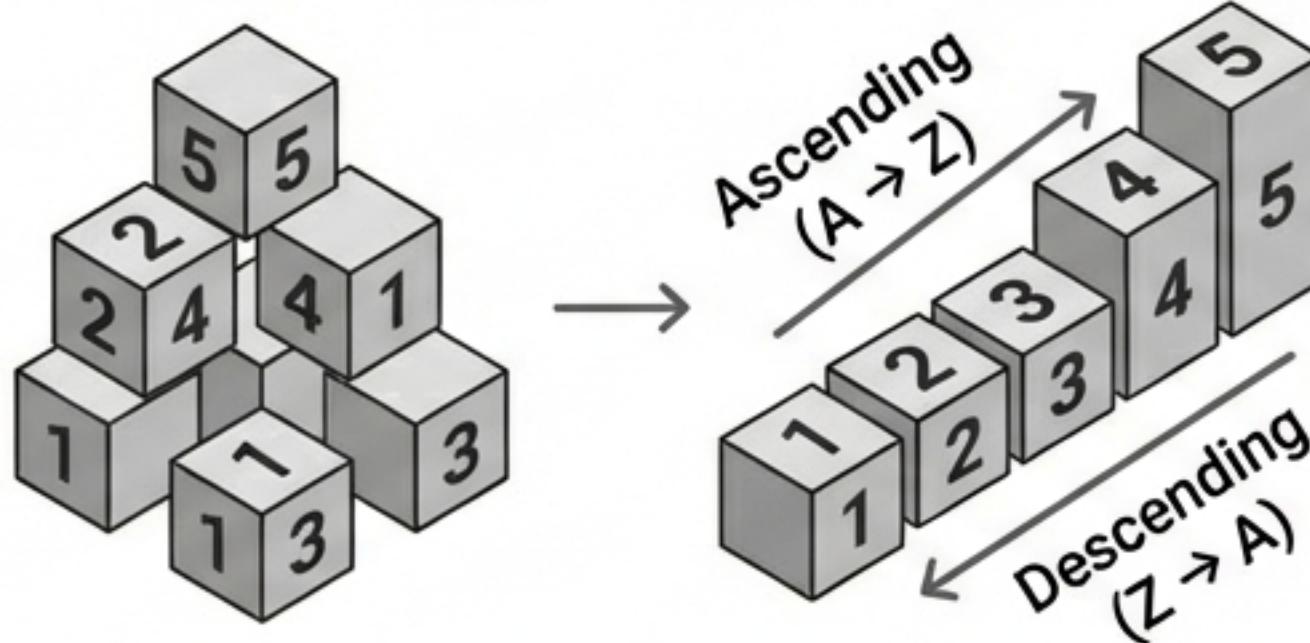


**Pv**

Loan Amount (Present Value)

# Data Analysis: Sorting & Filtering

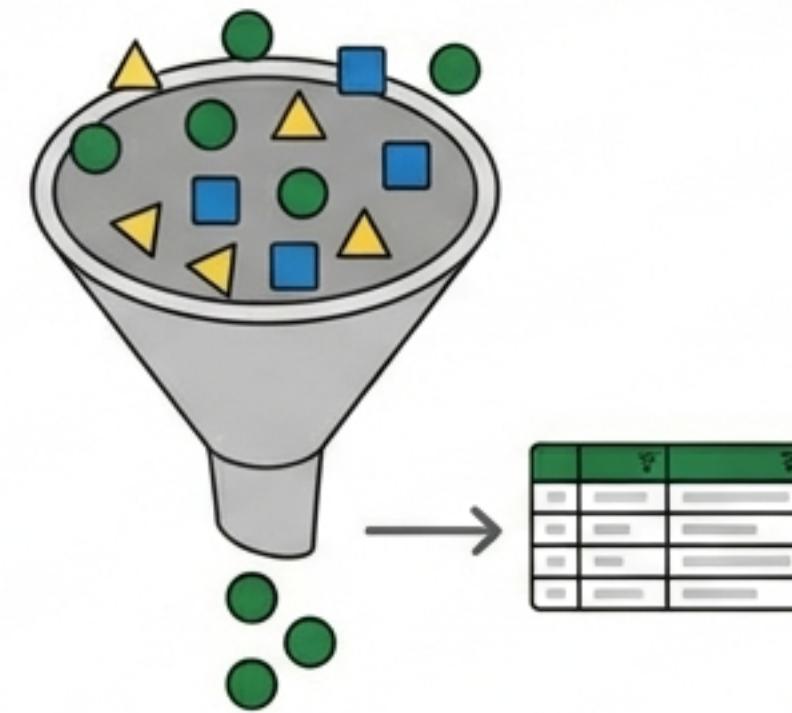
## ↑<sup>A</sup><sub>Z</sub> Sort / क्रमबद्ध करना



Arrange data in Ascending or Descending order.

Custom Sort (Sort by Color/Multiple Columns).

## Filter / छानना



**Ctrl + Shift + L**

Data के specific subsets को display करने के लिए।

AutoFilter adds drop-down arrows to headers.

# The Power of Pivot Tables

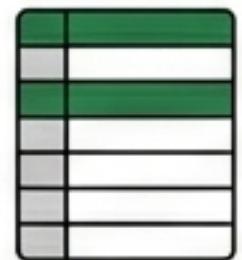
Large data sets को summarize और analyze करने के लिए एक powerful tool.

## Filters

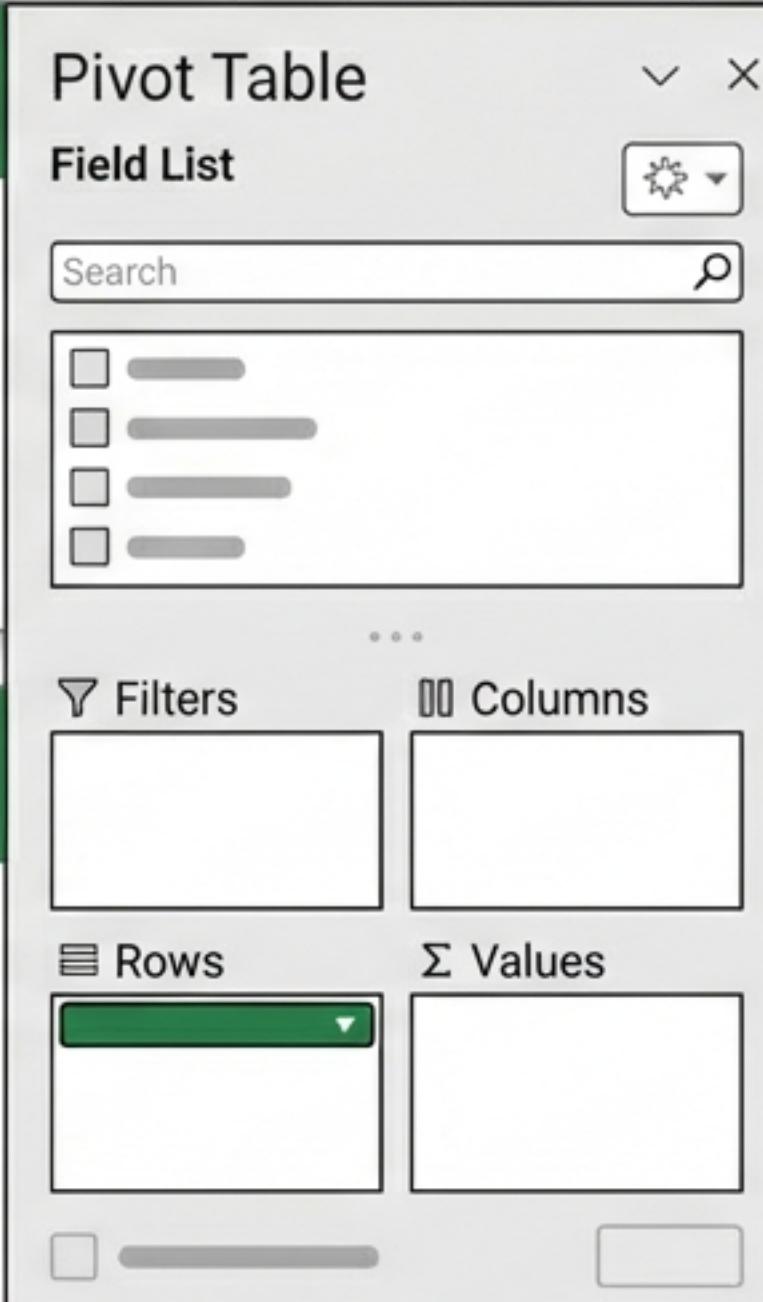


Restricts the entire dataset view.

## Rows

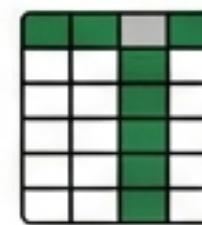


Data displayed vertically (e.g., Products).



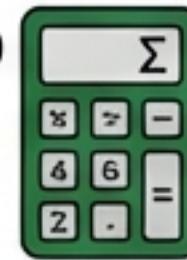
## Columns

Data displayed horizontally (e.g., Months).

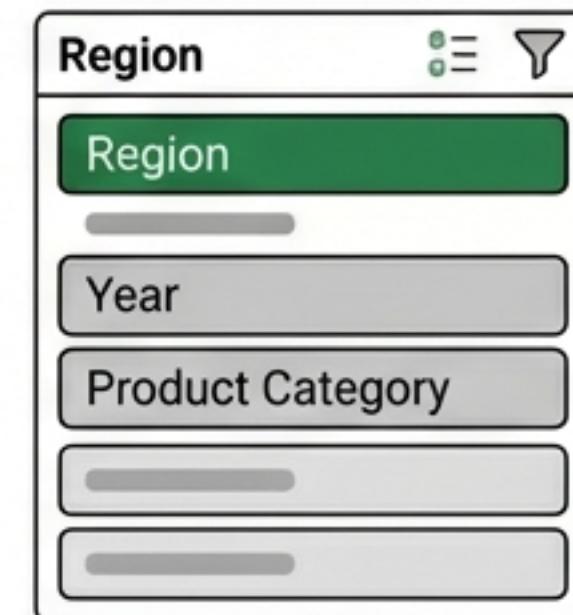


## Values

Calculation Hub (Sum, Count, Average).



## Slicers

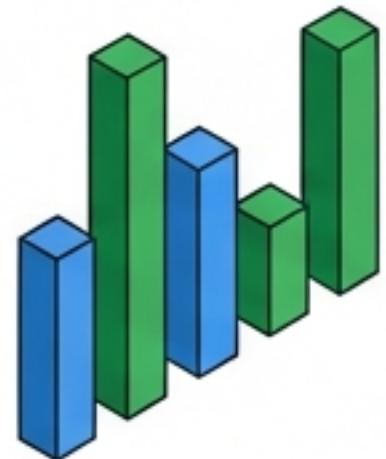


Slicers: Buttons जो instant filtering options provide करते हैं.

# Visualizing Data with Charts

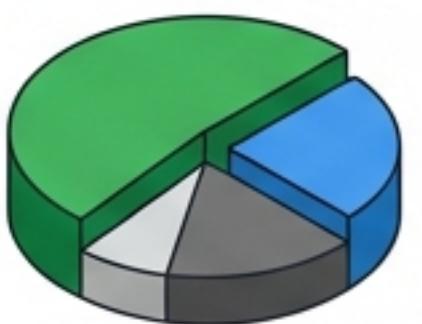
Data को graphical format में convert करना ताकि trends और patterns आसानी से समझ सकें।

## Column/Bar



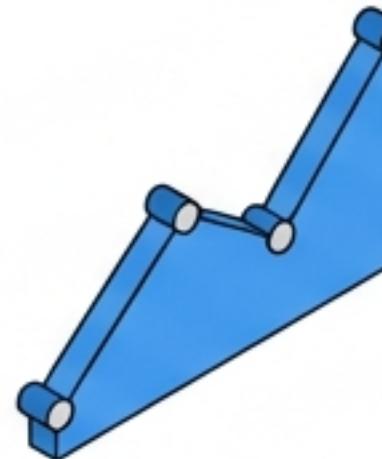
Comparison  
(Categories के बीच).

## Pie



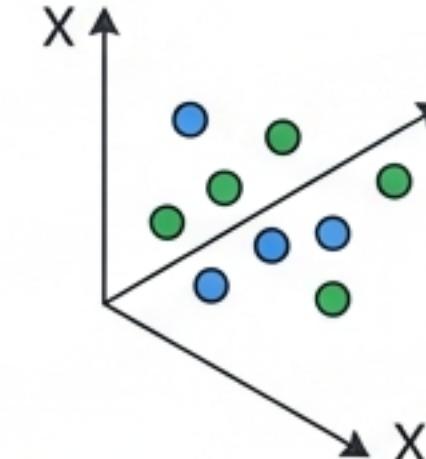
Parts of a whole (%)

## Line



Trends over time  
(Time के साथ trends).

## Scatter



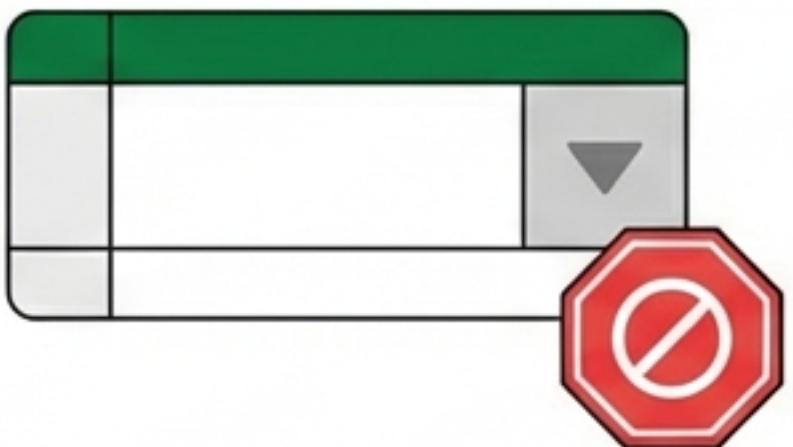
Correlation



**Pro Tip:** F11 — Create Bar Chart Instantly.

# Advanced Tools: Control & Prediction

## Data Validation

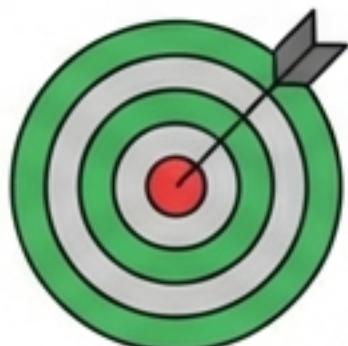


Users केवल valid data ही enter करें यह सुनिश्चित करने के लिए।

Restrict input to Dates or Lists.

## What-If Analysis

### Goal Seek (लक्ष्य प्राप्त करें)



Output को specific value पर set करके input calculate करना।

### Scenario Manager

Analyzing different variables.

## Hyperlinks

**Ctrl + K**

लिंक टेली से इकरना फिस पर कबसते हैं।

Link cells to external files or websites.

# Master Cheat Sheet: File & Editing

File Management	Editing & Formatting
New Workbook: Ctrl + N	<b>Edit Cell: F2</b>
Open:  Ctrl + O	Bold: Ctrl + B
Save As: F12	Currency Format: Ctrl + Shift + \$
Print Preview:  Ctrl + F2	Percentage Format: Ctrl + Shift + %
Close File: Ctrl + W	AutoSum: Alt + =
	Fill Down: Ctrl + D (Copies cell from above)

# Troubleshooting Errors & Visibility Shortcuts

## Error Decoder



Column width is too narrow  
(सेल की चौड़ाई कम है).



Divided by Zero  
(संख्या को 0 से विभाजित किया).



Value not found  
(Lookup failed).



Wrong argument type  
(Math on text).

## Visibility Shortcuts

Hide Row:

Ctrl + 9

Unhide Row:

Ctrl + Shift + 9

Hide Column:

Ctrl + 0

Unhide Column:

Ctrl + Shift + 0

"Excel decision-making में help करता है through detailed reports and analysis."