

Excel

This Document offers a collection of tips and tricks for using Excel.

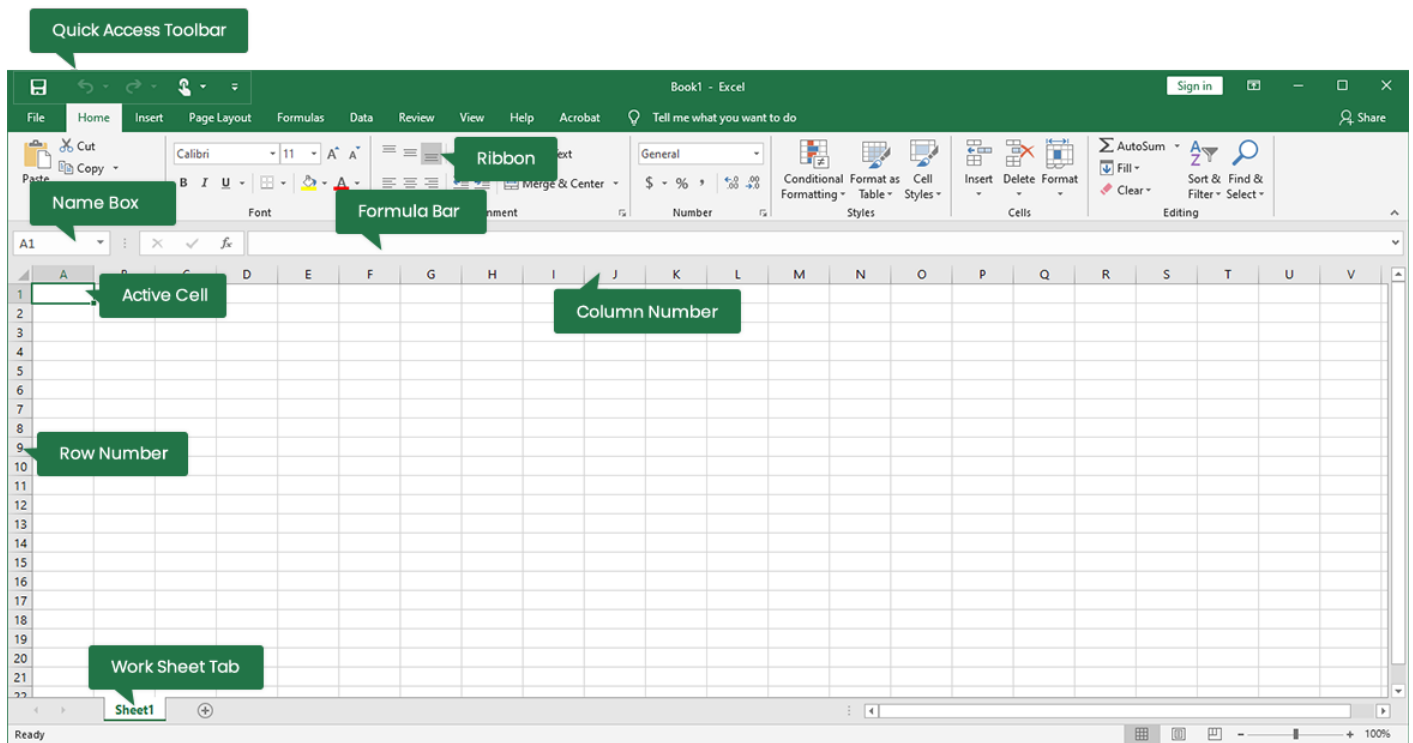
- [Excel](#)

Excel

To become proficient in Excel, there are several key sections and topics you should focus on. Here's a breakdown of the main areas to learn:

1. Basic Excel Skills

- **Excel Interface** : Learn the Ribbon, toolbar, and how to navigate Excel.
- **Entering Data** : Understanding how to input, edit, and format data in cells.
- **Basic Formulas** : Learn basic arithmetic operations like =SUM(), =AVERAGE(), =MIN(), =MAX().
- **Cell Referencing** : Learn about relative, absolute, and mixed references ('A1', '\$A\$1', 'A\$1').
- **Formatting Cells** : Formatting numbers, dates, text, alignment, and using styles.
- **Copy, Cut, Paste, and AutoFill** : Learn how to manipulate data quickly.



2. Intermediate Formulas and Functions

- **Logical Functions** : =IF(), =AND(), =OR(), =NOT().
- **Lookup Functions** : =VLOOKUP(), =HLOOKUP(), =INDEX(), =MATCH(), =XLOOKUP().
- **Text Functions** : =CONCATENATE(), =LEFT(), =RIGHT(), =LEN(), =TRIM().
- **Date and Time Functions** : =TODAY(), =NOW(), =DATEDIF(), =DAY(), =MONTH(), =YEAR().
- **Math and Statistical Functions** : =SUMIF(), =COUNTIF(), =AVERAGEIF(), =ROUND().

- **Error Handling** : =IFERROR(), =ISERROR().

Logical Functions in Excel

The screenshot displays the Excel ribbon with the 'Formulas' tab selected. The 'Logical' group is highlighted, and a dropdown menu is open, listing the following functions: AND, FALSE, IF, IFERROR, IFNA, IFS, NOT, OR, SWITCH, TRUE, and XOR. Several formula boxes are overlaid on the screenshot, showing the syntax for the following functions:

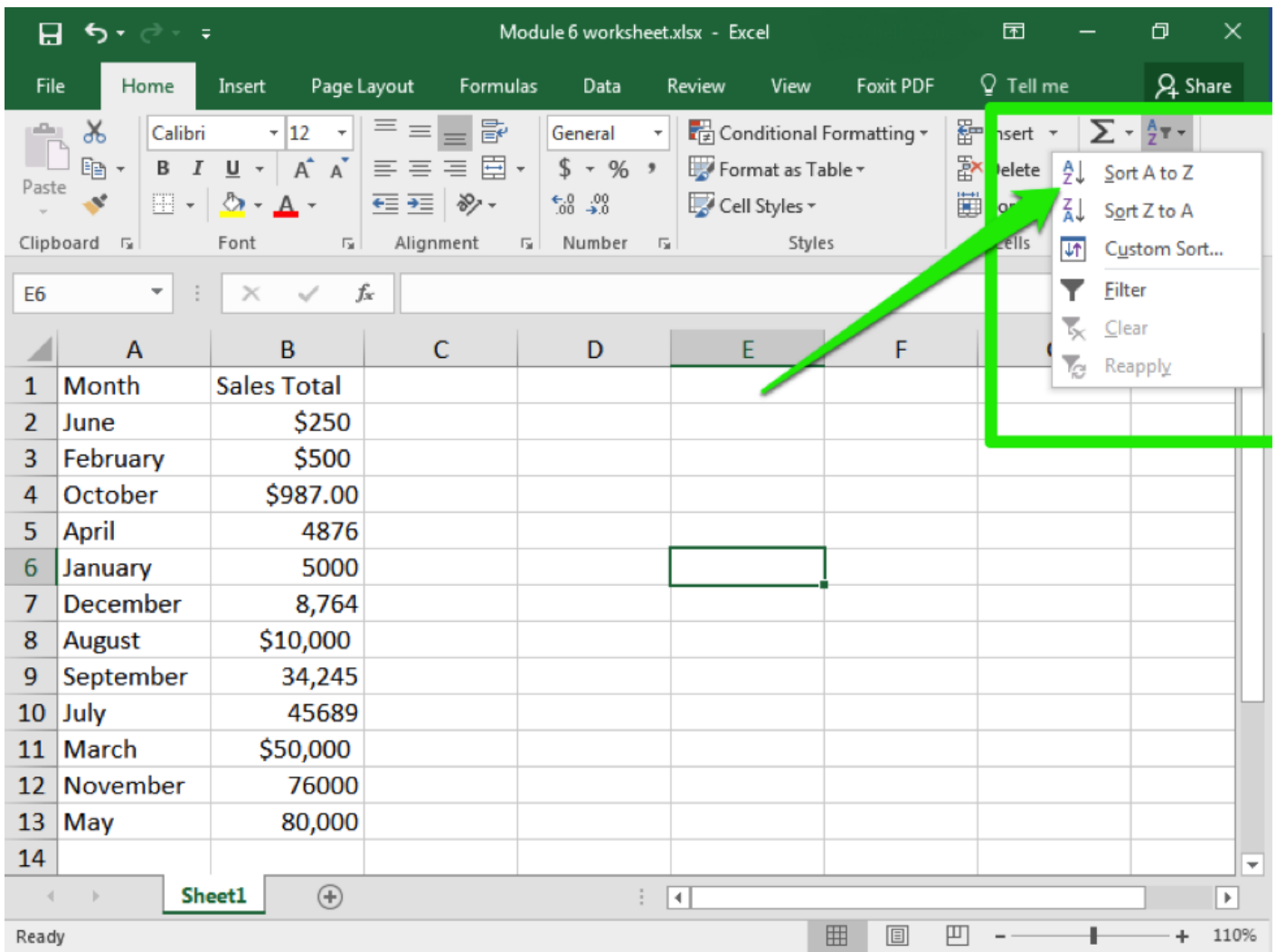
- =IF()**: IF(logical_test, [value_if_true], [value_if_false])
- =AND()**: AND(logical1, [logical2], ...)
- =OR()**: OR(logical1, [logical2], ...)
- =XOR()**: XOR(logical1, [logical2], ...)
- =NOT()**: NOT(logical)

A red dashed arrow points from the 'Formulas' tab to the 'Logical' group. In the background, a table is visible with columns 'Age' and 'Not e'.

	Age	Not e
1		
2	50	Not e
3	70	Elig
4	78	Elig
5	45	Not e
6		
7		
8		
9		

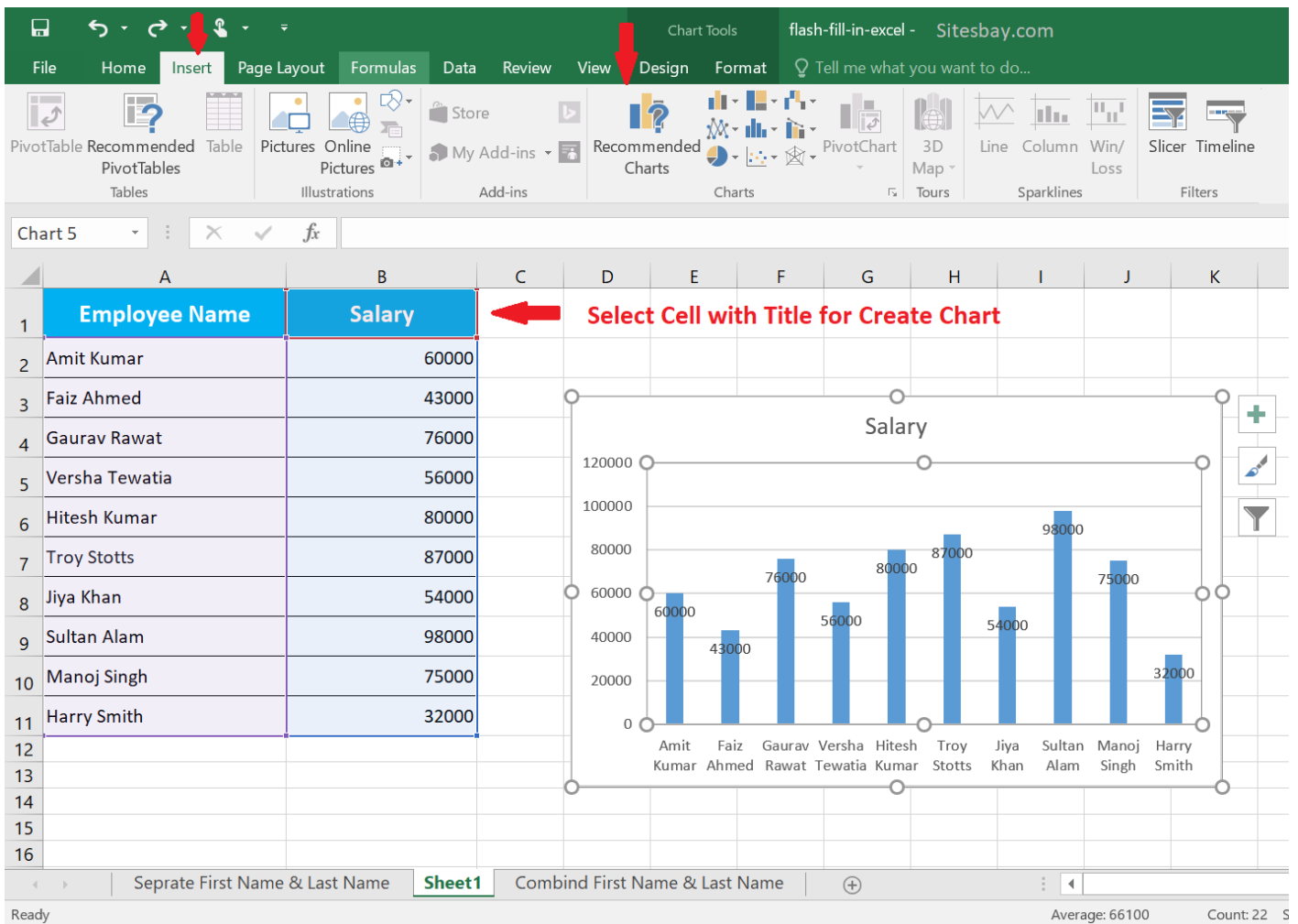
3. Data Management

- **Sorting and Filtering** : Learn how to sort data and apply filters.
- **Data Validation** : Setting up rules for data entry, dropdown lists.
- **Conditional Formatting** : Highlighting cells based on specific conditions.
- **Named Ranges** : Defining names for ranges and using them in formulas.
- **Remove Duplicates** : Learn how to clean and manage large datasets.



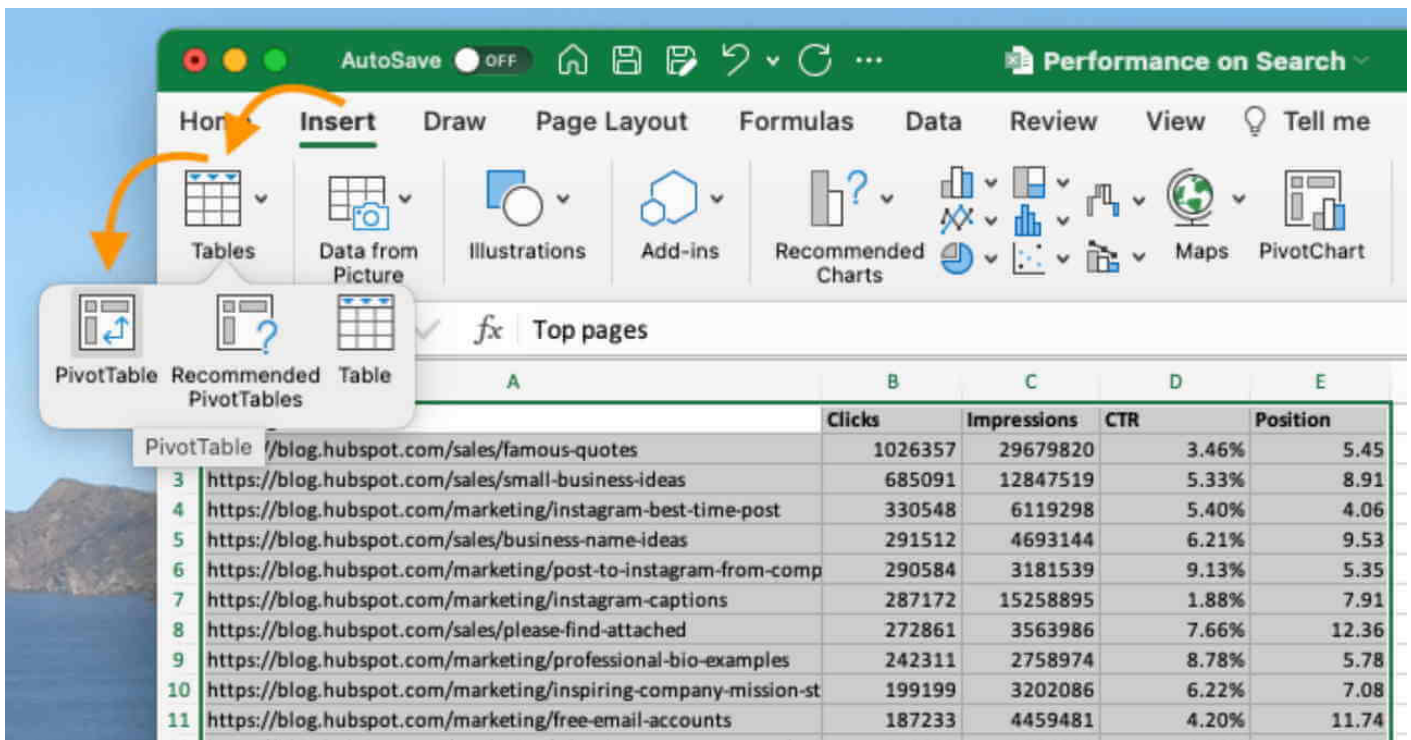
4. Charts and Visualization

- **Creating Charts** : Learn how to create bar charts, line charts, pie charts, etc.
- **Chart Customization** : Formatting, adjusting data series, adding labels, etc.
- **Sparklines** : Tiny charts within a cell.
- **Pivot Charts** : Creating charts from Pivot Tables for data analysis.



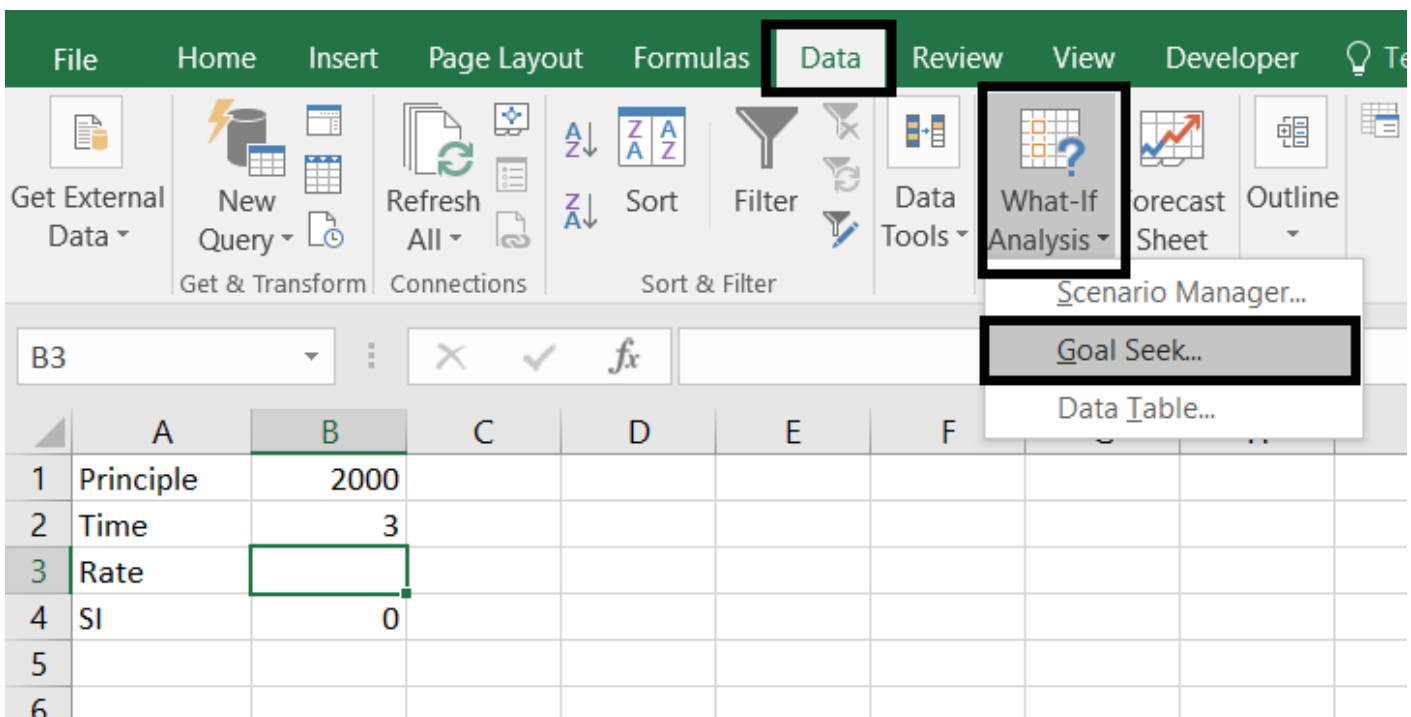
5. Pivot Tables

- **Creating Pivot Tables** : Learn how to create Pivot Tables to summarize data.
- **Sorting and Filtering in Pivot Tables** : Organizing data effectively in Pivot Tables.
- **Group Data** : Grouping data by categories like months, years, etc.
- **Slicers and Timeline** : Adding interactivity to Pivot Tables.



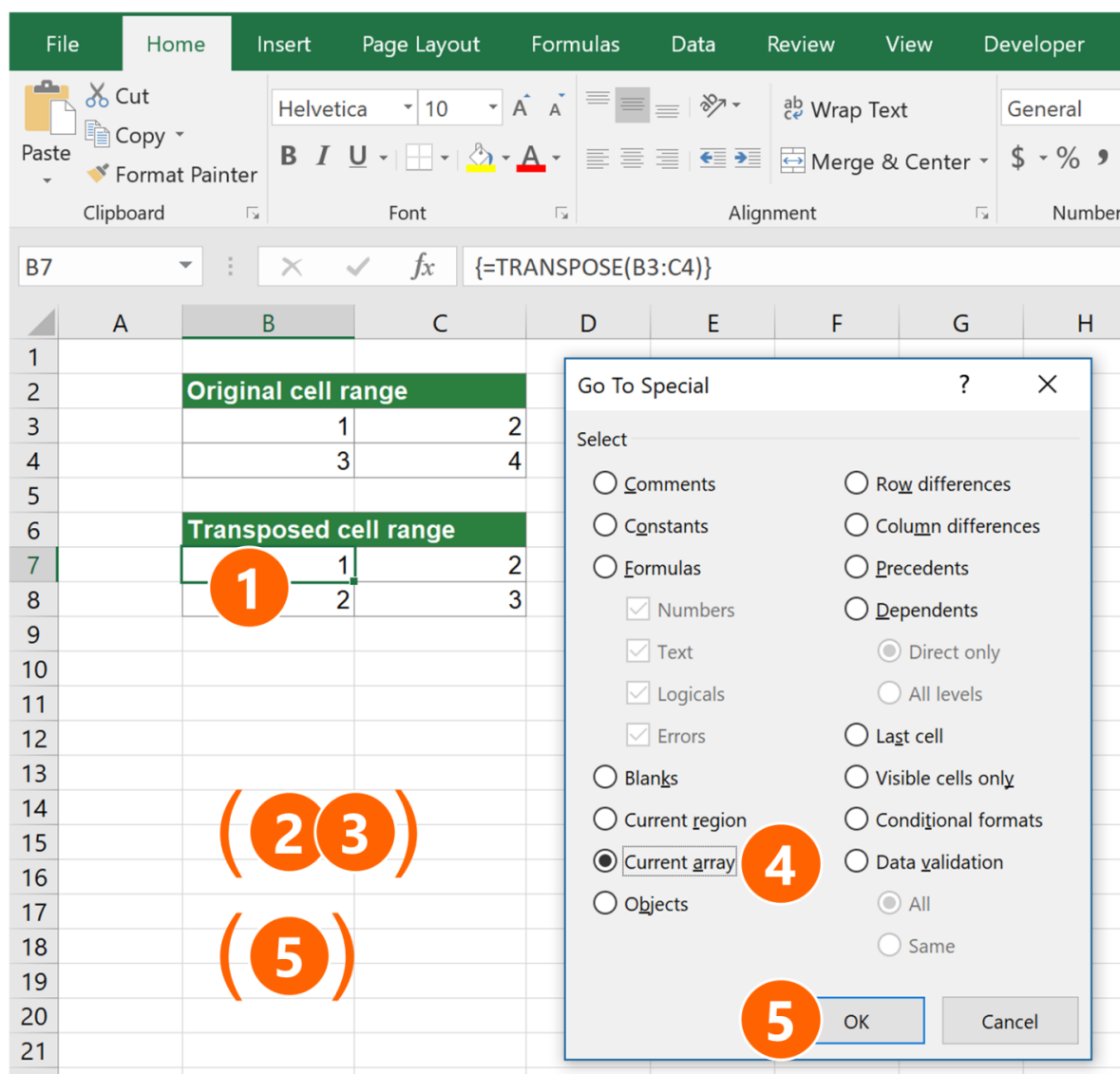
6. Data Analysis Tools

- **What-If Analysis** : Goal Seek, Scenario Manager, and Data Tables.
- **Solver** : Learn how to solve complex problems with Solver.
- **Forecasting and Trendlines** : Use Excel's forecasting tools to project future data.



7. Advanced Functions

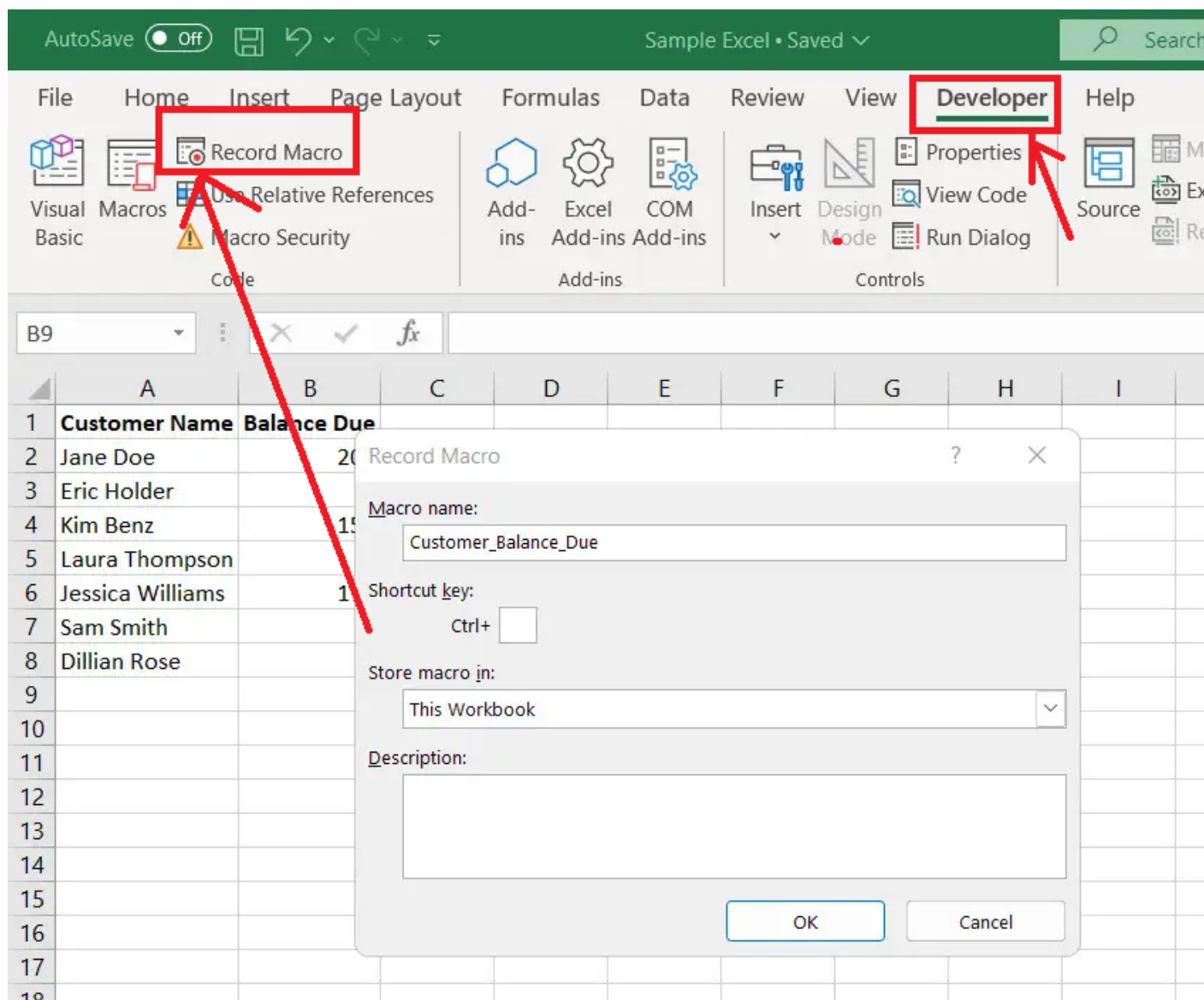
- **Array Formulas** : Learn about single and multi-cell array formulas.
- **Dynamic Arrays** : Functions like =UNIQUE(), =SORT(), =FILTER(), =SEQUENCE().
- **Power Query**: Importing, cleaning, and transforming data from various sources.
- **Power Pivot** : Creating complex data models and working with large datasets.



8. Macros and VBA

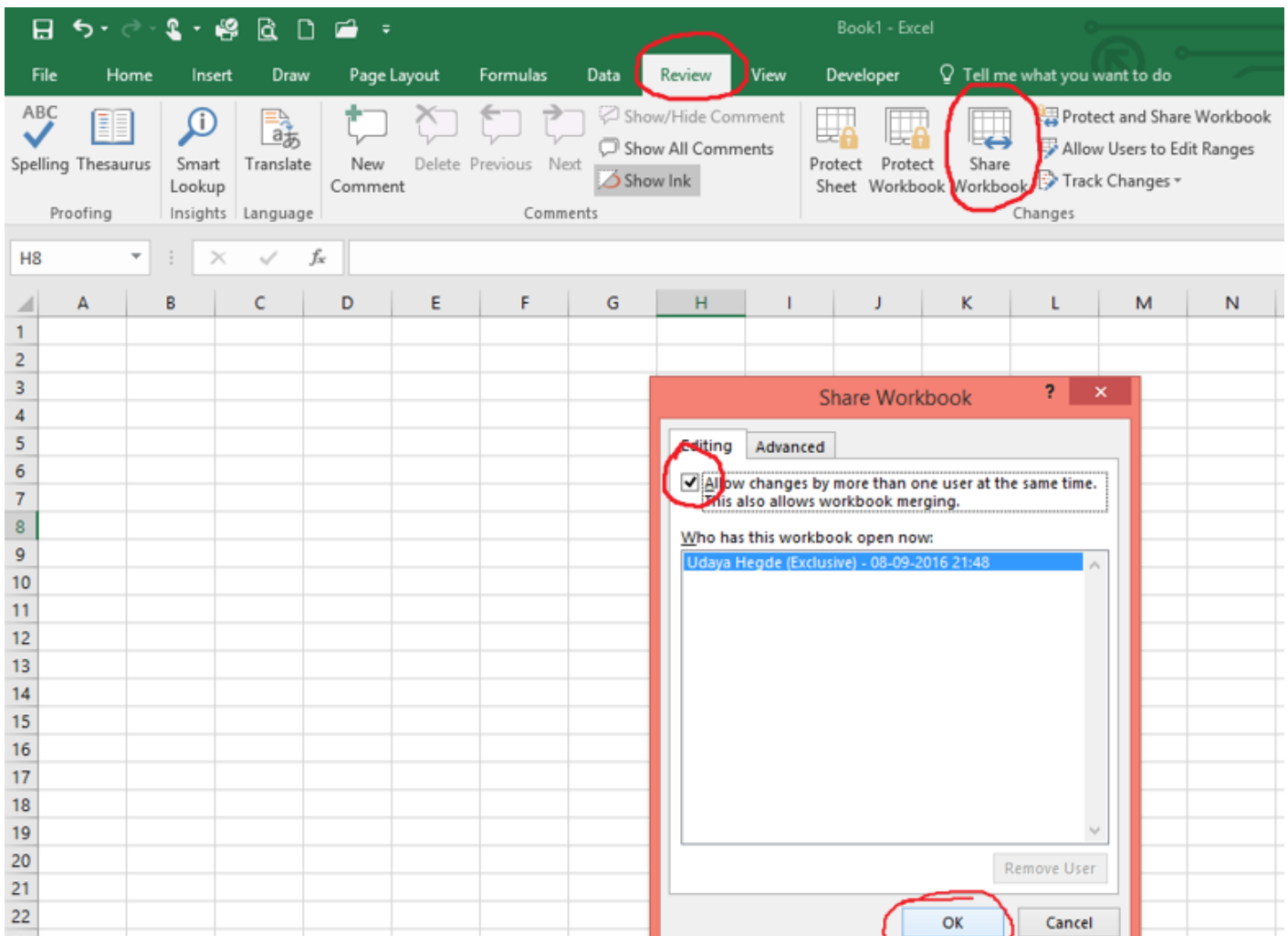
- **Recording Macros** : Automate repetitive tasks using the macro recorder.
- **Introduction to VBA (Visual Basic for Applications)** : Learn basic VBA programming for automating tasks.

- **Creating Custom Functions** : Write your own functions using VBA.



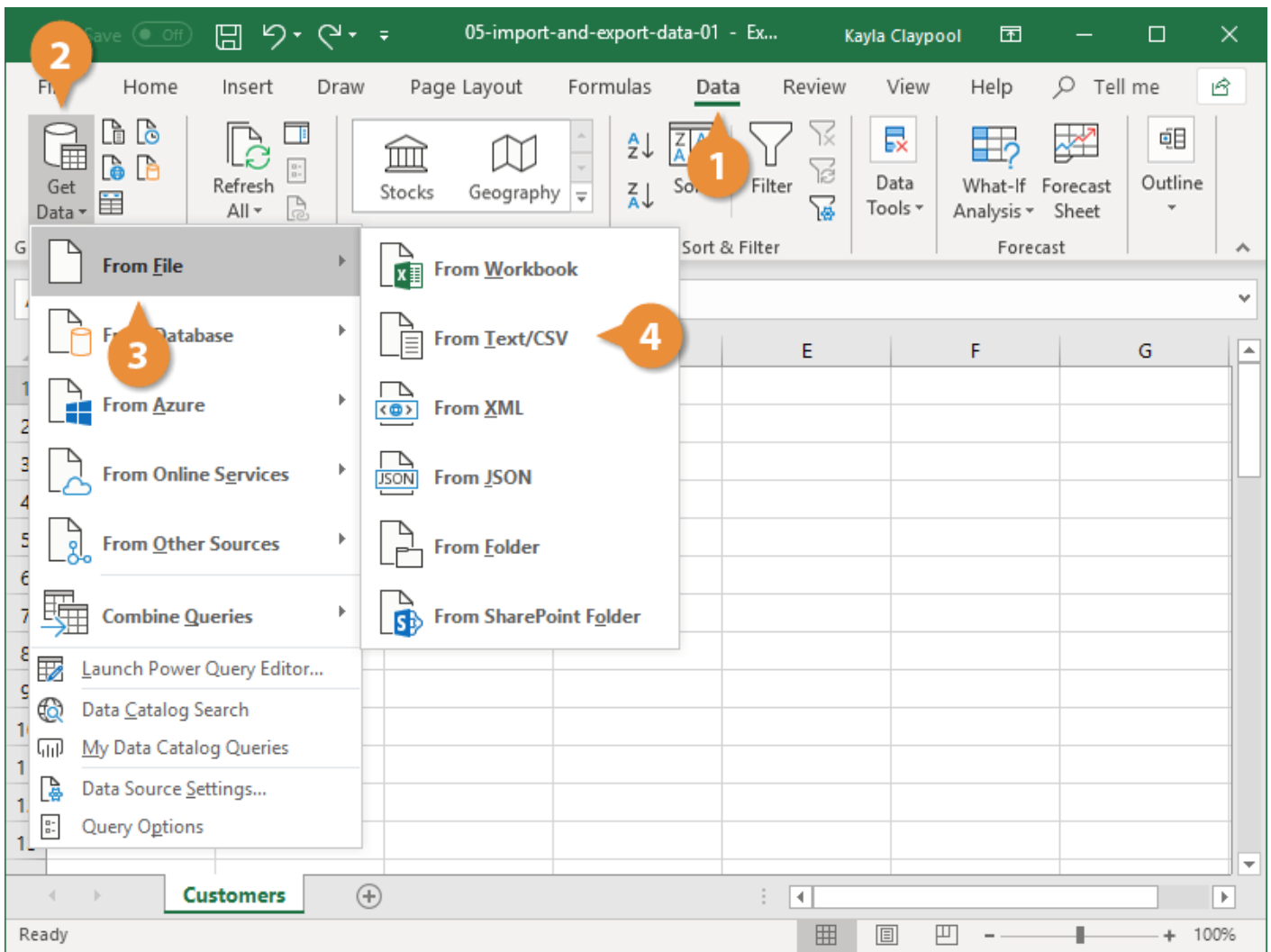
9. Collaboration and Sharing

- **Sharing Workbooks** : Collaborating on the same workbook with others.
- **Track Changes** : Tracking changes made by others in a shared workbook.
- **Protecting Worksheets/Workbooks** : Applying protection to prevent editing of certain sections.
- **Comments and Notes** : Adding comments to collaborate and provide feedback.



10. Data Import and Export

- **Importing Data** : Import data from external sources like text files, CSV, databases, etc.
- **Exporting Data** : Save data in different formats like CSV, PDF, etc.
- **Connecting to External Data Sources** : Use Power Query or external connections to databases.



10. References

<https://www.guru99.com/excel-tutorials.html>

<https://trumpexcel.com/learn-excel/>