Chapter-11 Working with Data Sorting in MS Excel

Sorting data in Excel helps you organize and arrange it in a specific order, either ascending or descending. Sorting is an essential tool for managing large datasets, making it easier to analyze information, find patterns, and present data in a meaningful way.

1. Types of Sorting

A. Basic Sorting

This involves sorting data based on a single column.

- **Sort A to Z** (ascending order): Sorts text alphabetically from A to Z or numbers from smallest to largest.
- **Sort Z to A** (descending order): Sorts text alphabetically from Z to A or numbers from largest to smallest.

B. Custom Sorting

This allows you to sort data based on multiple columns, with more complex sorting rules.

- **Sort by multiple columns**: You can set multiple levels of sorting to sort by more than one criterion.
- **Sort by custom lists**: You can define custom sorting orders (e.g., "Monday, Tuesday, Wednesday" instead of alphabetically).

2. Sorting Data in Excel

A. Sorting with the Ribbon

- 1. Select any cell within the data range or table.
- 2. Go to the Data tab on the Ribbon.
- 3. Use the **Sort Ascending** (A to Z) or **Sort Descending** (Z to A) buttons in the **Sort & Filter** group for simple sorting.

B. Custom Sorting

1. Select any cell within the data range.

- 2. Click the **Sort** button in the **Data** tab.
- 3. The **Sort** dialog box appears, allowing you to choose:
 - o **Column**: The column to sort by.
 - Sort On: The type of data to sort (e.g., Cell Values, Cell Color, Font Color).
 - o Order: Ascending or Descending.

Steps to Sort by Multiple Columns

- 1. Open the **Sort** dialog box.
- 2. Click **Add Level** to create a new sorting rule.
- 3. Set the first sort column, and then set the second column (and so on) in order of priority.
- 4. Click **OK** to apply the sort.

3. Sorting by Custom Lists

Custom lists let you define a specific order for sorting, such as days of the week or months of the year.

Steps to Use a Custom List for Sorting

- 1. Select the data you want to sort.
- 2. Go to the **Data** tab, click **Sort**, and in the **Sort by** dropdown, select the column to sort by.
- 3. In the Order dropdown, select Custom List.
- 4. In the **Custom Lists** dialog, choose from existing lists (like months or days) or create your own list (e.g., "High", "Medium", "Low").
- 5. Click **OK** to apply the custom order.

4. Sorting Data in a Table

When working with Excel Tables (created with Ctrl + T), sorting is more straightforward:

- Sorting automatically applies to the entire table, keeping rows intact.
- Table headers remain fixed, making sorting more efficient.

Steps to Sort in a Table

- 1. Click the dropdown arrow in the header of the column you want to sort.
- 2. Select Sort A to Z or Sort Z to A.
- 3. The table will be sorted by that column, and all rows will shift accordingly.

5. Sorting with Multiple Criteria

Sorting by multiple columns allows you to order data in layers, based on multiple criteria.

Example:

You have a dataset of employees sorted by department and then by salary.

• Data:

	Α	В	С
1	Department	Employee	Salary
2	HR	John	50000
3	Sales	Mary	70000
4	HR	Peter	55000
5	Sales	Alice	80000

• Steps:

- 1. Select any cell in the dataset.
- 2. Go to the **Data** tab and click **Sort**.
- 3. In the **Sort By** dropdown, choose **Department**.
- 4. Click **Add Level** to add a second sorting rule.
- 5. In the second level, choose **Salary**.
- 6. Set the sorting order for both columns and click **OK**.

Result:

The data will be first sorted by department, then by salary within each department.

6. Sorting by Color or Font

Excel also allows you to sort data by cell color, font color, or icon in a cell.

Steps to Sort by Color/Font:

- 1. Select the range or table.
- 2. Open the **Sort** dialog.
- 3. In the Sort On dropdown, select Cell Color, Font Color, or Cell Icon.
- 4. Choose the color or icon to sort by, and set the order.

7. Sorting Data in Descending Order

Example: Sorting Numerical Data in Descending Order

- 1. Select the column containing numerical data.
- 2. Go to the Data tab and click Sort Z to A.
- 3. The data will be sorted from largest to smallest.

8. Sorting Data Using Keyboard Shortcuts

You can use the following keyboard shortcuts to sort data quickly:

- Sort Ascending (A to Z): Alt + D + S then choose Sort A to Z.
- Sort Descending (Z to A): Alt + D + S then choose Sort Z to A.

9. Sorting Data in Excel 365 with Dynamic Arrays

With dynamic arrays, when sorting, the entire dataset will automatically update when data is modified. This can be useful for creating dynamic, real-time reports and dashboards.

10. Best Practices for Sorting Data

- 1. **Avoid Sorting Part of a Range**: Always select the entire range or table before sorting. Sorting just one column can lead to disorganized data.
- 2. **Check for Blank Rows or Columns**: Blank cells can interfere with sorting. Make sure there are no unnecessary blanks in your data.
- 3. **Use Tables for Better Sorting**: Tables allow easier sorting and help maintain data integrity by ensuring that rows are correctly moved with their headers.
- 4. **Sort Numbers Carefully**: Ensure that numerical values are properly recognized as numbers, not text, to prevent incorrect sorting.