**Task 1: Create a Basic Bar Chart to Display Marks**

**Objective:**

To visually represent student marks using a bar chart.

**Steps:**

1. Open the Excel sheet containing student names and marks.
2. Highlight the data range (e.g., names in one column and their corresponding marks in another).
3. Go to the **Insert** tab in the Ribbon.
4. Select the **Bar Chart** option under the "Charts" section.
5. Choose a simple **Clustered Bar Chart**.
6. Add a title to the chart (e.g., "Student Marks").
7. Save your work.

**Task 2: Apply Conditional Formatting for Marks**

**Objective:**

Highlight marks below 50% to identify students who need improvement.

**Steps:**

1. Open the Excel sheet containing the marks.
2. Select the column with the student marks.
3. Go to the **Home** tab in the Ribbon.
4. Click on **Conditional Formatting** in the "Styles" group.
5. Choose **Highlight Cell Rules** > **Less Than**.
6. In the pop-up box, type 50 and select a color (e.g., red fill) to highlight the cells.
7. Press **OK**.
8. Save your work.

**Task 3: Calculate Total and Average Marks**

**Objective:**

Use formulas to calculate the total and average marks for the class.

**Steps:**

1. Open the Excel sheet containing the student marks.
2. In a blank cell below the marks column, type the label **Total Marks**.
3. In the cell next to it, use the formula:  
   =SUM(range)  
   Replace range with the actual cell range (e.g., B2:B11).
4. Below the Total Marks row, type the label **Average Marks**.
5. In the cell next to it, use the formula:  
   =AVERAGE(range)  
   Replace range with the actual cell range (e.g., B2:B11).
6. Press Enter after typing each formula.
7. Save your work.

**Task 4: Sort Students by Marks (Highest to Lowest)**

**Objective:**

Organize the student list to rank them by their marks in descending order.

**Steps:**

1. Open the Excel sheet containing student names and marks.
2. Highlight the entire table (including headers like "Student Name" and "Marks").
3. Go to the **Data** tab in the Ribbon.
4. Click on the **Sort** button.
5. In the Sort pop-up box:
   * Under "Column," select the **Marks** column.
   * Under "Sort On," choose **Values**.
   * Under "Order," select **Largest to Smallest**.
6. Press **OK** to apply the sorting.
7. Save your work.

**Task 5: Create a Pie Chart to Show Grade Distribution**

**Objective:**

Visualize the percentage of students in different grade categories (e.g., A, B, C, D).

**Steps:**

1. Categorize the marks into grades:
   * Add a new column titled **Grade** next to the Marks column.
   * Use a formula or manually assign grades (e.g., A for 85+, B for 70-84, etc.).
   * Example formula (assuming marks are in column B):  
     =IF(B2>=85, "A", IF(B2>=70, "B", IF(B2>=50, "C", "D")))
   * Drag the formula down for all rows.
2. Highlight the Grade column.
3. Go to the **Insert** tab in the Ribbon.
4. Select **Pie Chart** from the "Charts" section.
5. Choose a **2-D Pie Chart** option.
6. Customize the chart:
   * Add a title (e.g., "Grade Distribution").
   * Show percentages or data labels for each segment.
7. Save your work.