Assignment: Data Visualization with Matplotlib

Instructions:

Using the given dataset, complete the following tasks using **Matplotlib**:

1. Basic Line Plot

- Create a **line plot** showing sales trends over the months for each **Product Category**.
- Use different colors for each category and add a legend.

2. Bar Chart

- Create a **bar chart** to compare total sales across different **regions**.
- Label the bars and use different colors for each region.

3. Pie Chart

- Create a **pie chart** to show the percentage of total sales for each **Product Category** in **March**.

4. Scatter Plot

- Create a **scatter plot** showing the relationship between **Units Sold** and **Sales ($)**.
- Differentiate points using colors for different **product categories**.

5. Histogram

- Create a **histogram** to show the distribution of **Profit ($)**.

6. Subplots

- Use **subplots** to combine at least 3 of the above visualizations into a single figure.

Bonus Task: Customization

- Improve the visuals by adding labels, grid lines, and using different color themes.

Submission:

- Save all plots in a Jupyter Notebook file (`matplotlib_assignment.ipynb`).
- Add comments explaining each visualization.
- Upload the `.ipynb` file along with the dataset.