TASK 3:

Create a bar chart and a line chart using Matplotlib to visualize data from a Pandas DataFrame . Customize the charts with labels, titles, and legends.

1. **Import Libraries**

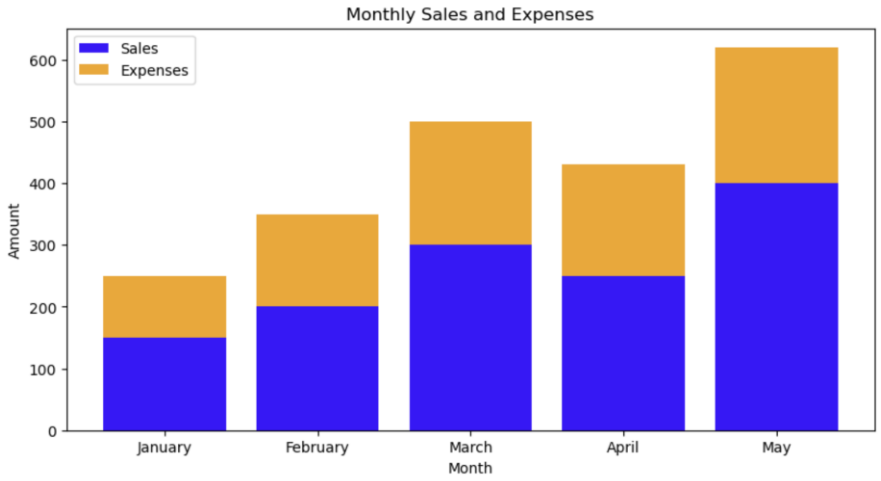
```
In [1]: import pandas as pd
        import matplotlib.pyplot as plt
```

2. **Create a Sample DataFrame**

```
In [2]: # Sample DataFrame
        data = {
            'Month': ['January', 'February', 'March', 'April', 'May'],
            'Sales': [150, 200, 300, 250, 400],
            'Expenses': [100, 150, 200, 180, 220]
        }
        df = pd.DataFrame(data)
```

3. **Create a Bar Chart**

```
In [3]: # Bar Chart
        plt.figure(figsize=(10, 5))
        plt.bar(df['Month'], df['Sales'], color='blue', label='Sales')
        plt.bar(df['Month'], df['Expenses'], color='orange', bottom=df['Sales'], label='Expenses')
        plt.xlabel('Month')
        plt.ylabel('Amount')
        plt.title('Monthly Sales and Expenses')
        plt.legend()
        plt.show()
```



4. **Create a Line Chart**

In [4]:

```
# Line Chart
plt.figure(figsize=(10, 5))
plt.plot(df['Month'], df['Sales'], marker='o', linestyle='-', color='blue', label='Sales')
plt.plot(df['Month'], df['Expenses'], marker='s', linestyle='--', color='orange', label='Expenses')
plt.xlabel('Month')
plt.ylabel('Amount')
plt.title('Monthly Sales and Expenses Trend')
plt.legend()
plt.grid(True)
plt.show()
```