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.

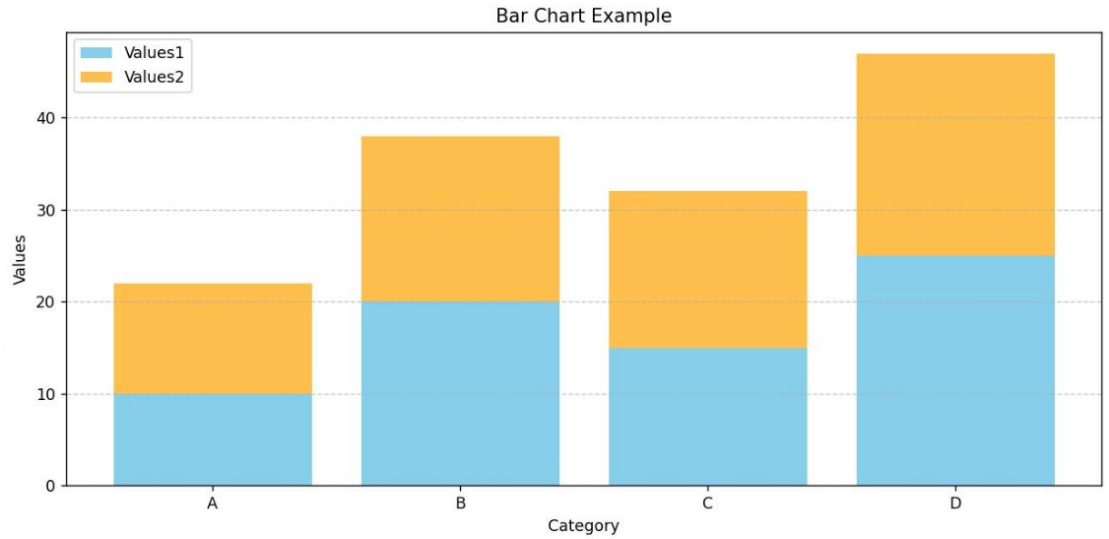
CODE:

```
import pandas as pd
import matplotlib.pyplot as plt

# Sample DataFrame
data = {
    'Category': ['A', 'B', 'C', 'D'],
    'Values1': [10, 20, 15, 25],
    'Values2': [12, 18, 17, 22]
}
df = pd.DataFrame(data)

# Bar Chart
plt.figure(figsize=(10, 5))
plt.bar(df['Category'], df['Values1'], color='skyblue', label='Values1')
plt.bar(df['Category'], df['Values2'], color='orange', alpha=0.7, label='Values2', bottom=df['Values1'])
plt.title('Bar Chart Example')
plt.xlabel('Category')
plt.ylabel('Values')
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.tight_layout()
plt.savefig('bar_chart.png')  # Save the figure
plt.show()

# Line Chart
plt.figure(figsize=(10, 5))
plt.plot(df['Category'], df['Values1'], marker='o', label='Values1')
plt.plot(df['Category'], df['Values2'], marker='s', label='Values2')
plt.title('Line Chart Example')
plt.xlabel('Category')
plt.ylabel('Values')
plt.legend()
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.tight_layout()
```

```
plt.savefig('line_chart.png')  # Save the figure
plt.show()
```

OUTPUT:

Bar Chart-



Line Chart-