

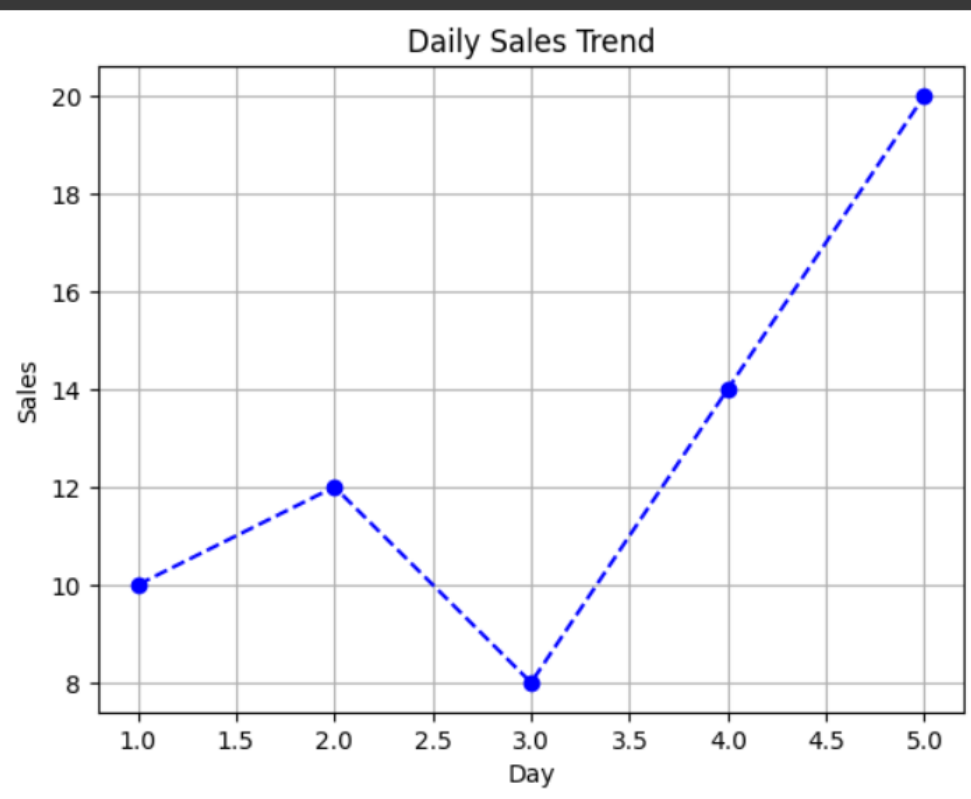
AIM:

To visualize and understand datasets using basic plots - **line charts**, **bar charts** and **histograms** with the Matplotlib library in Python.

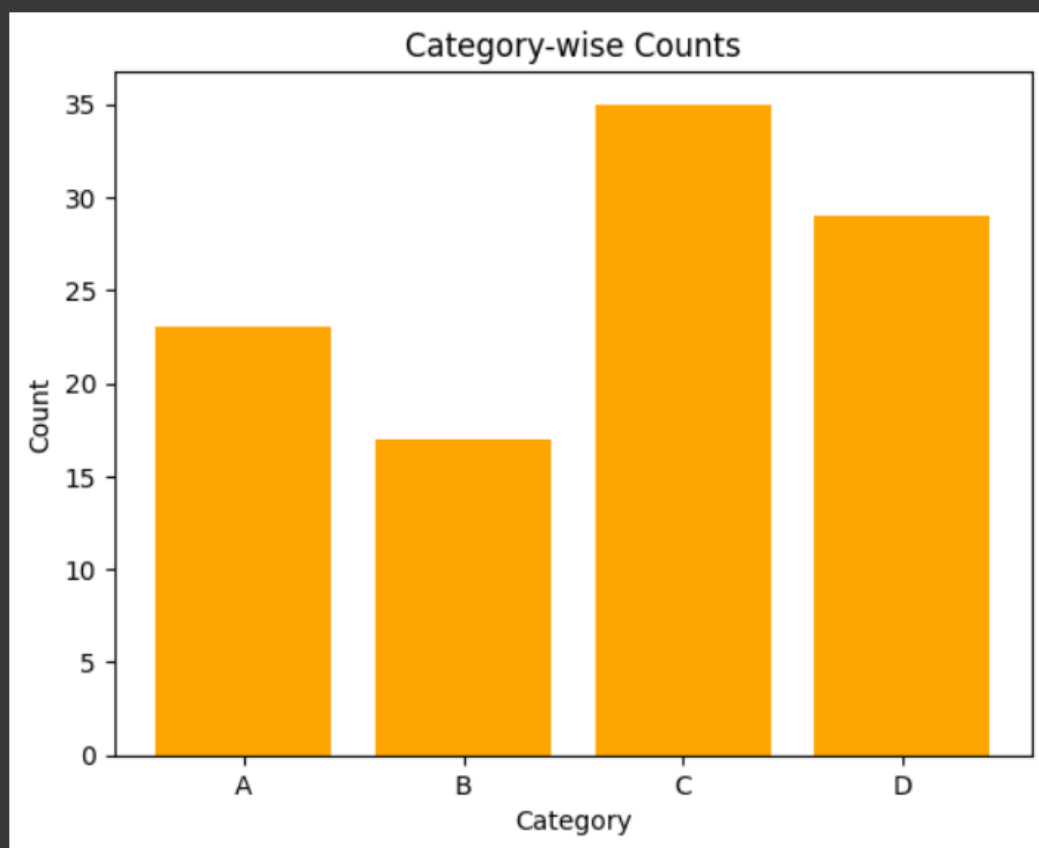
```
import matplotlib.pyplot as plt
import numpy as np
```



```
#Line Chart
days = [1, 2, 3, 4, 5]
sales = [10, 12, 8, 14, 20]
plt.plot(days, sales, color='blue', marker='o', linestyle='--')
plt.title('Daily Sales Trend')
plt.xlabel('Day')
plt.ylabel('Sales')
plt.grid(True)
plt.show()
```



```
▶ #Bar chart
categories = ['A', 'B', 'C', 'D']
values = [23, 17, 35, 29]
plt.bar(categories, values, color='orange')
plt.title('Category-wise Counts')
plt.xlabel('Category')
plt.ylabel('Count')
plt.show()
```





```
#Histogram
data = np.random.randn(1000)
plt.hist(data, bins=20, color='purple', edgecolor='black')
plt.title('Data Distribution')
plt.xlabel('Value Range')
plt.ylabel('Frequency')
plt.show()
```

