1.show population distribution among region using pie chart

```python
import matplotlib.pyplot as plt

# Sample data (replace with your actual data)
regions = ['North', 'South', 'East', 'West']
populations = [300000, 250000, 350000, 200000]

# Create pie chart
plt.pie(populations, labels=regions, autopct='%1.1f%%', startangle=90)
plt.title('Population Distribution Among Regions')
plt.axis('equal')  # Equal aspect ratio ensures that pie is drawn as a
circle.

#To see the output, run the code.

(np.float64(-1.0999994289797135),
 np.float64(1.099999719122084),
 np.float64(-1.1),
 np.float64(1.1))
```


Population Distribution Among Regions
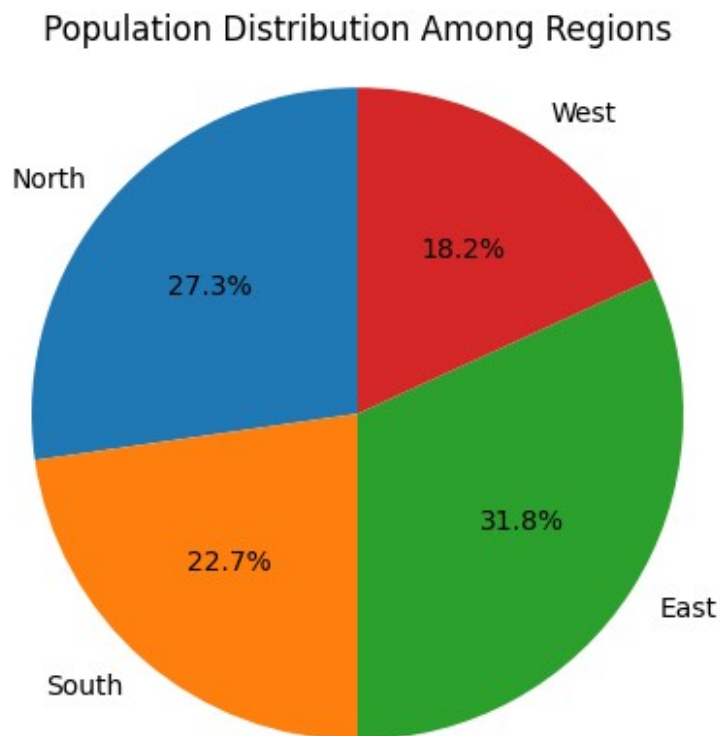
2.compare temperature between 2 cities using line chart

```python
import matplotlib.pyplot as plt
```

```
# Sample data (replace with your actual data)
days = [1, 2, 3, 4, 5, 6, 7]
city1_temp = [25, 28, 26, 29, 30, 27, 28]
city2_temp = [22, 24, 23, 25, 27, 24, 25]

# Create line chart
plt.plot(days, city1_temp, label='City 1')
plt.plot(days, city2_temp, label='City 2')
plt.xlabel('Days')
plt.ylabel('Temperature (°C)')
plt.title('Temperature Comparison between Two Cities')
plt.legend()

#To see the output, run the code.

<matplotlib.legend.Legend at 0x7bef983cfad0>
```


Temperature Comparison between Two Cities
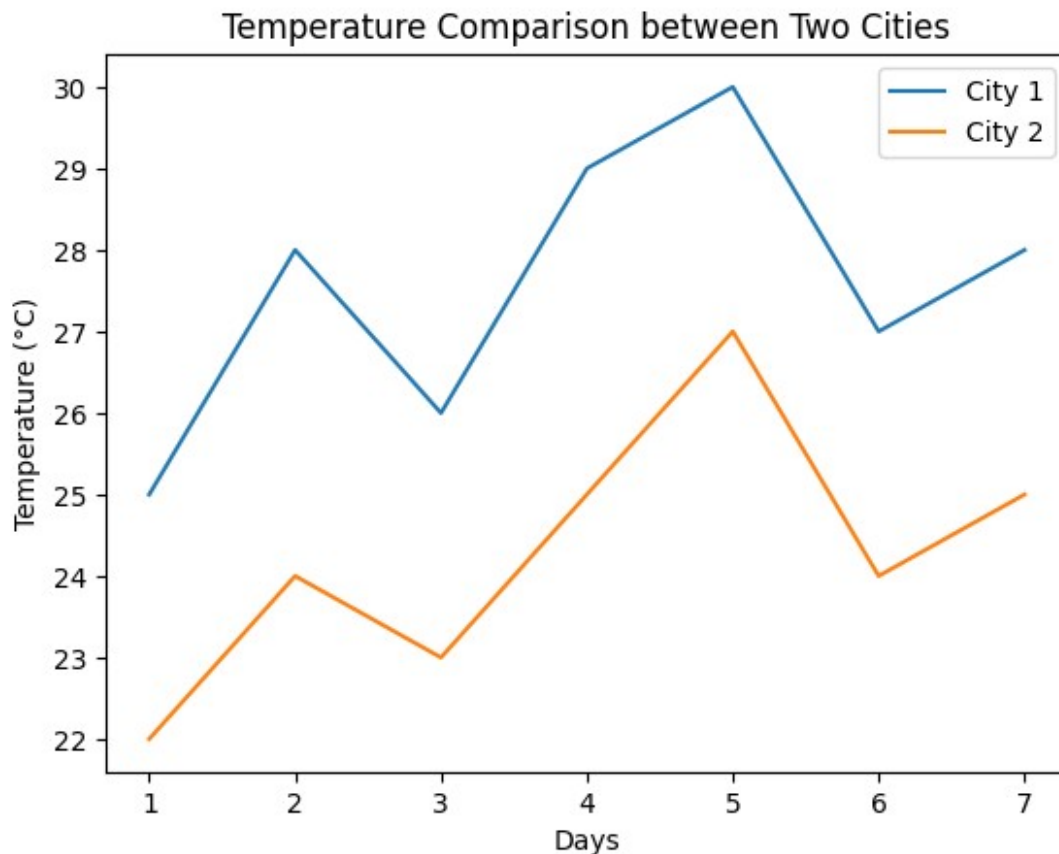
3.distribution of daily website visitors using histogram

```
import matplotlib.pyplot as plt

# Sample data (replace with your actual data)
daily_visitors = [1200, 1350, 1100, 1450, 1300, 1500, 1250]
```

```python
# Create histogram
plt.hist(daily_visitors, bins=10)  # Adjust 'bins' as needed
plt.xlabel('Daily Visitors')
plt.ylabel('Frequency')
plt.title('Distribution of Daily Website Visitors')

#To see the output, run the code.
```
```
Text(0.5, 1.0, 'Distribution of Daily Website Visitors')
```
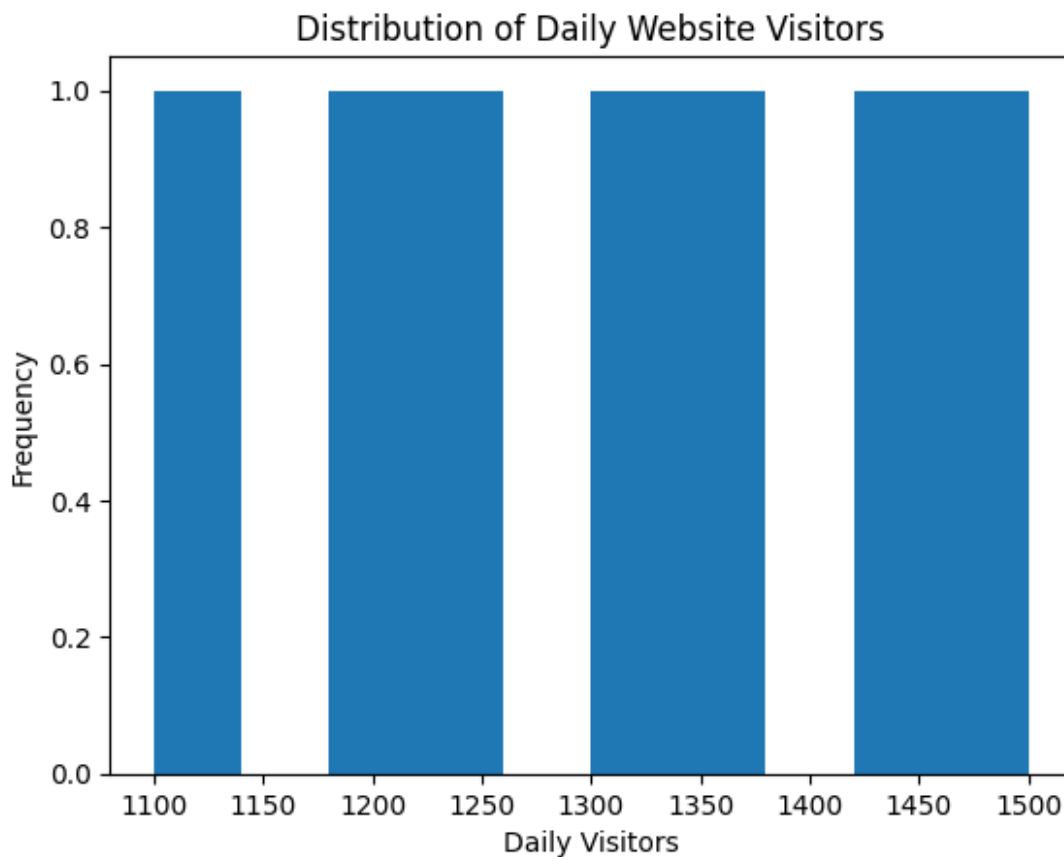

4.make relation between sales and profit using scatter plot(use grid)

```python
import matplotlib.pyplot as plt

# Sample data (replace with your actual data)
sales = [1000, 1200, 1500, 1300, 1600, 1400, 1700]
profit = [200, 250, 300, 280, 320, 300, 350]

# Create scatter plot
plt.scatter(sales, profit)
plt.xlabel('Sales')
plt.ylabel('Profit')
```

```
plt.title('Sales vs. Profit')
plt.grid(True)  # Add grid

#To see the output, run the code.
```


Sales vs. Profit
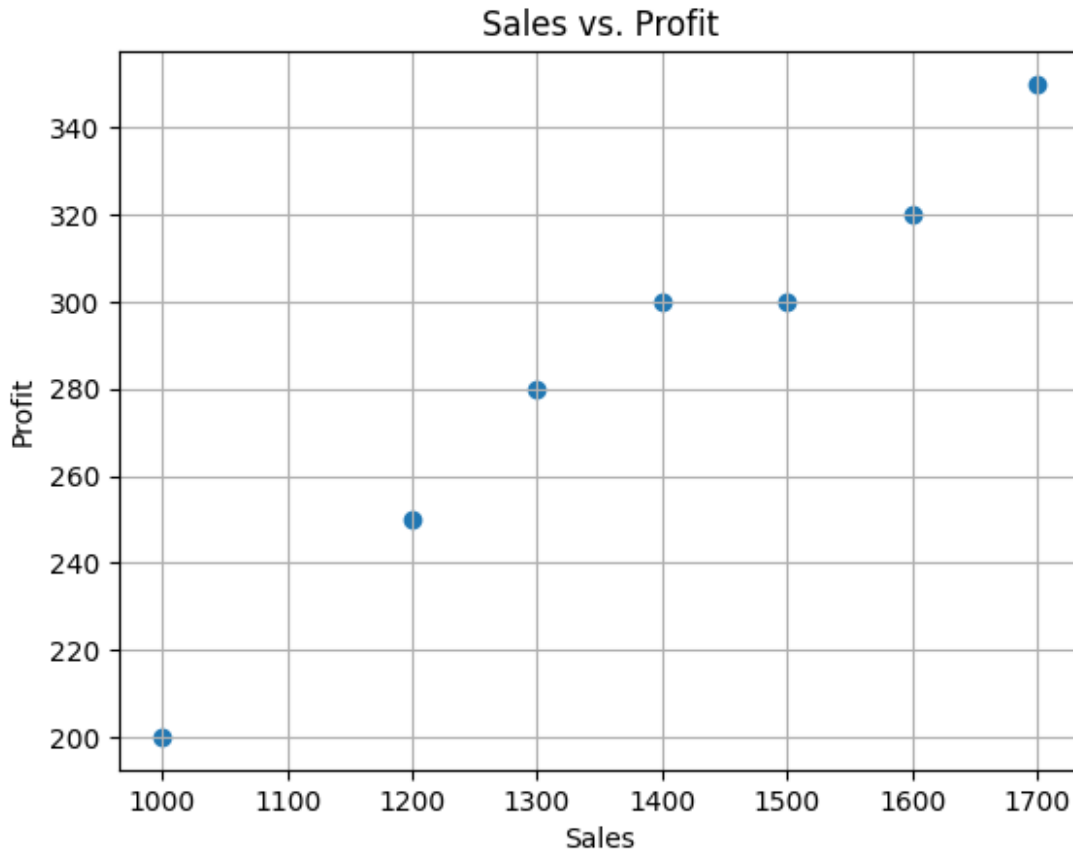
5.sales comparison of 2 products over a month

```
import matplotlib.pyplot as plt

# Sample data (replace with your actual data)
days = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
product1_sales = [50, 60, 55, 70, 65, 80, 75, 70, 85, 90]
product2_sales = [40, 45, 50, 60, 55, 70, 65, 60, 75, 80]

# Create line chart
plt.plot(days, product1_sales, label='Product 1')
plt.plot(days, product2_sales, label='Product 2')
plt.xlabel('Days')
plt.ylabel('Sales')
plt.title('Sales Comparison of Two Products Over a Month')
plt.legend()

#To see the output, run the code.
```

Sales Comparison of Two Products Over a Month