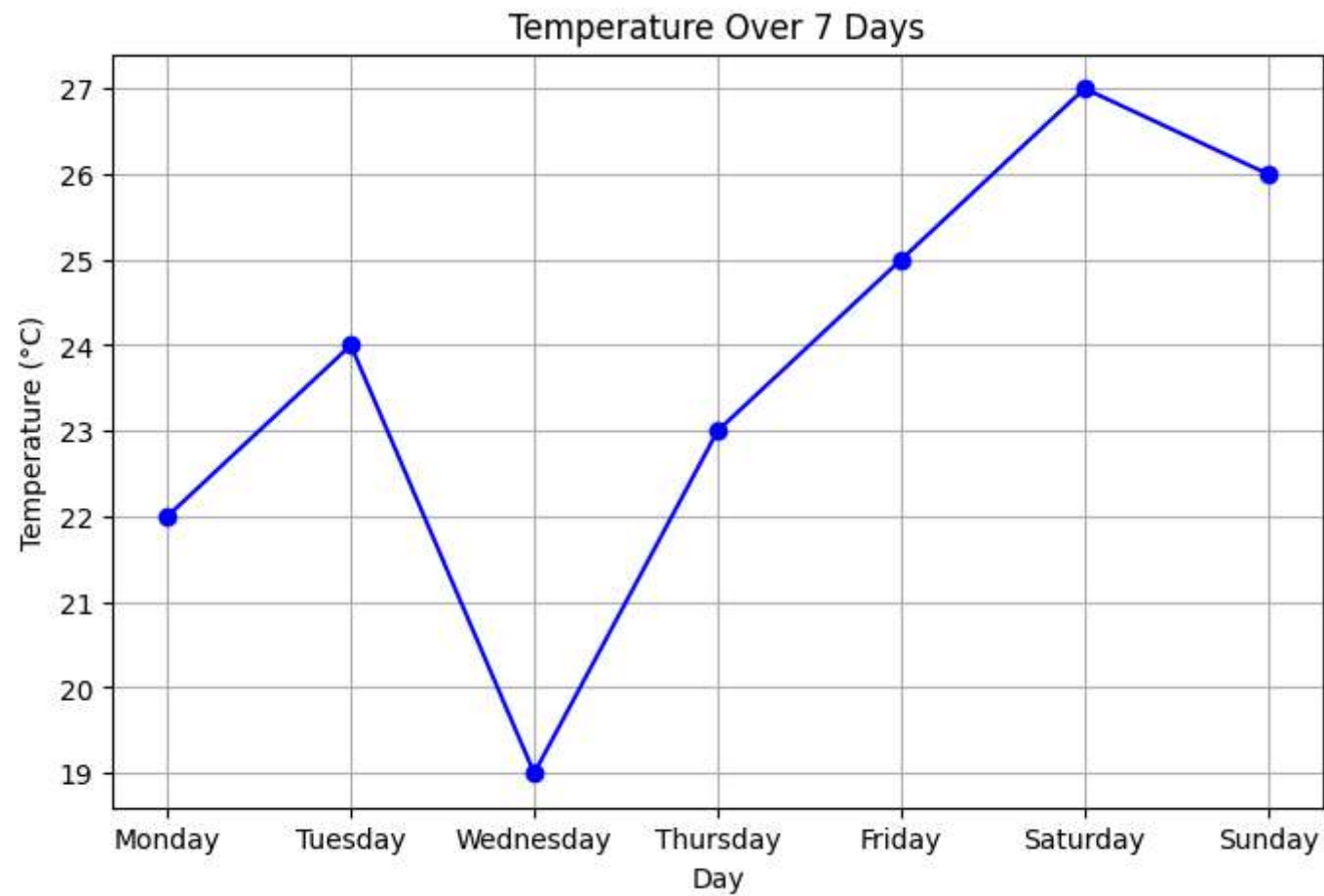


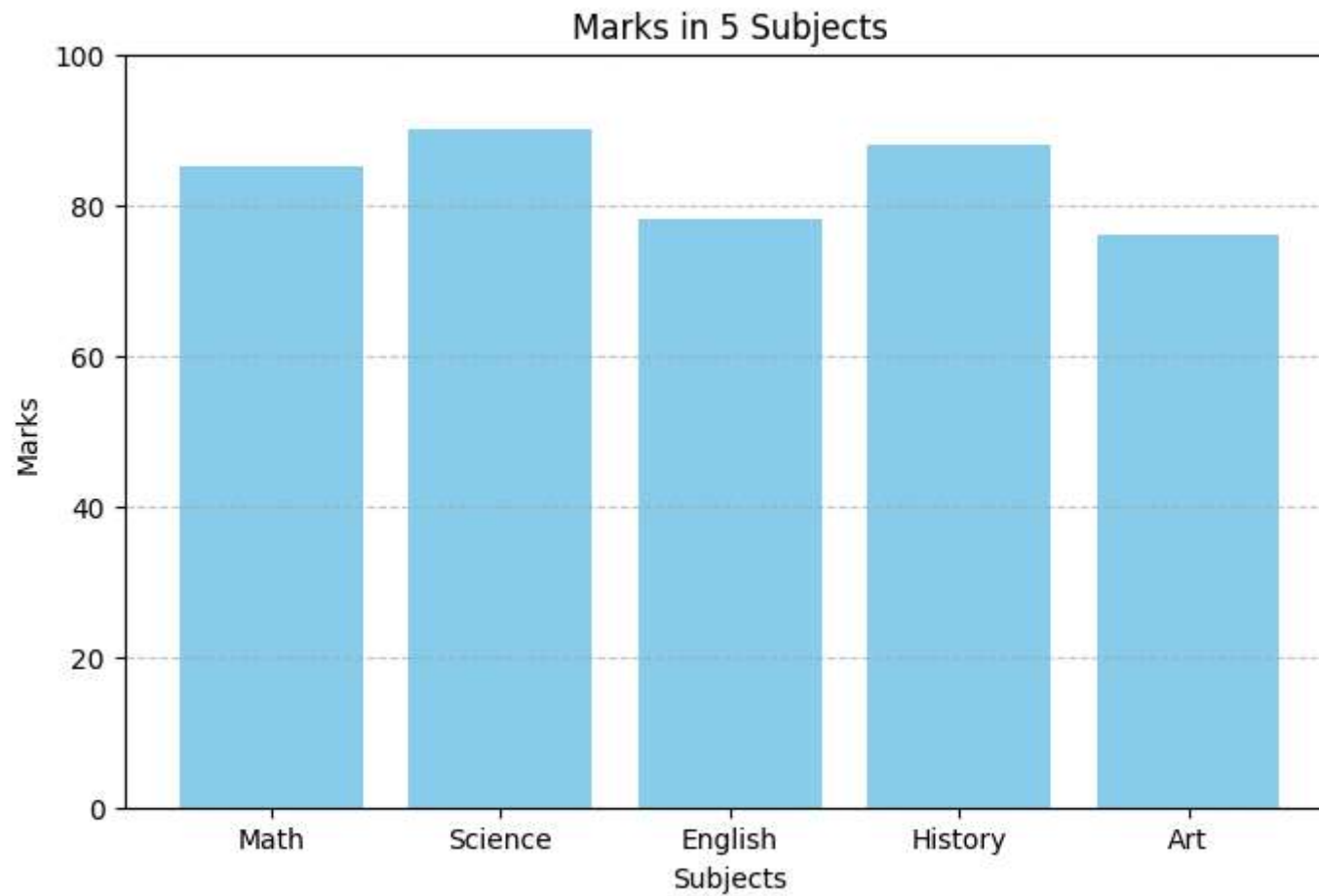
In [1]: *#1. Plot a line graph of temperature over 7 days*

```
import matplotlib.pyplot as plt
days = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']
temperature = [22, 24, 19, 23, 25, 27, 26]
plt.figure(figsize=(8,5))
plt.plot(days, temperature, marker='o', linestyle='-', color='b')
plt.title('Temperature Over 7 Days')
plt.xlabel('Day')
plt.ylabel('Temperature (°C)')
plt.grid(True)
plt.show()
```



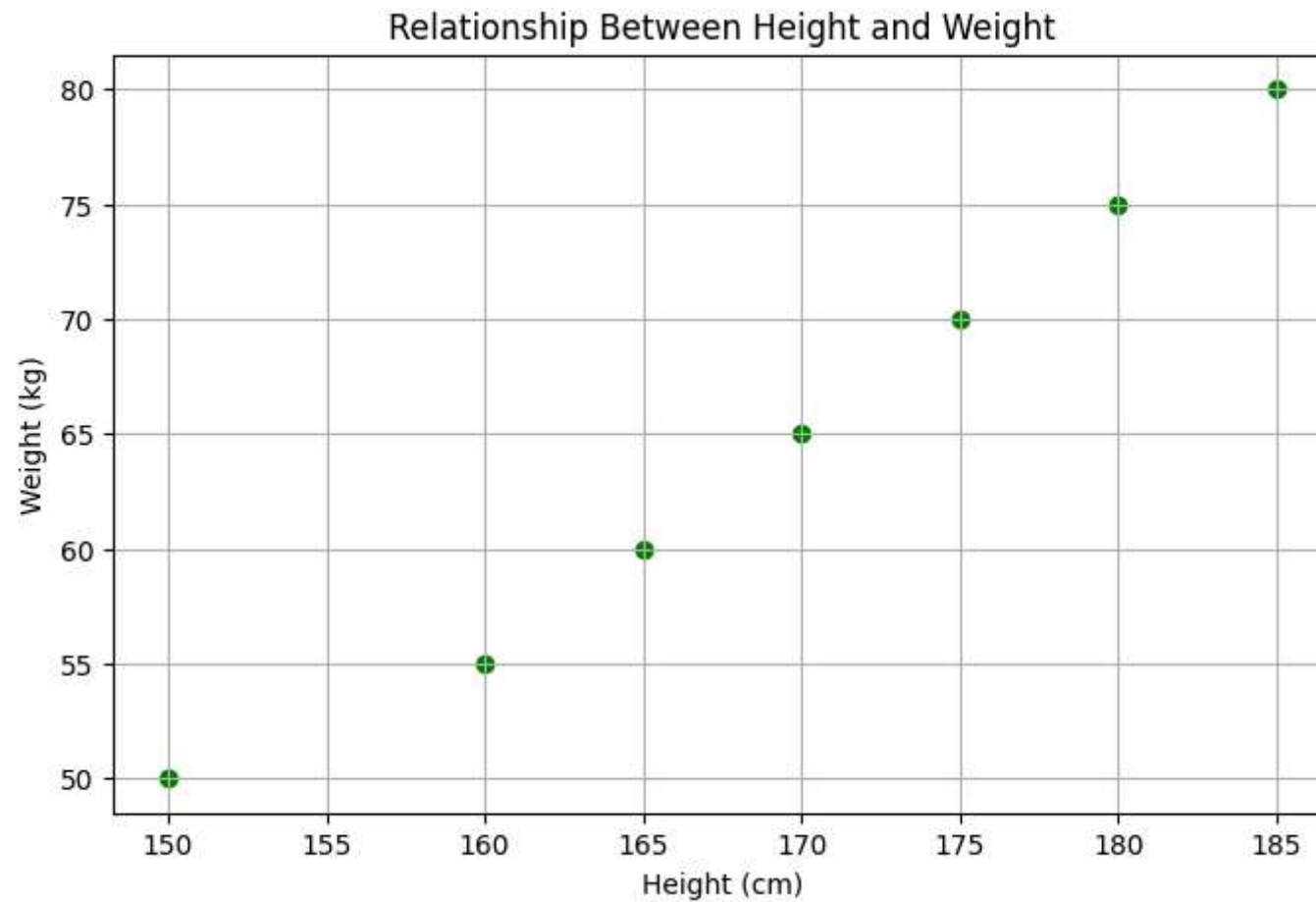
In [3]: #2.Create a bar chart showing marks in 5 subjects.

```
import matplotlib.pyplot as plt
subjects = ['Math', 'Science', 'English', 'History', 'Art']
marks = [85, 90, 78, 88, 76]
plt.figure(figsize=(8,5))
plt.bar(subjects, marks, color='skyblue')
plt.title('Marks in 5 Subjects')
plt.xlabel('Subjects')
plt.ylabel('Marks')
plt.ylim(0, 100)
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
```



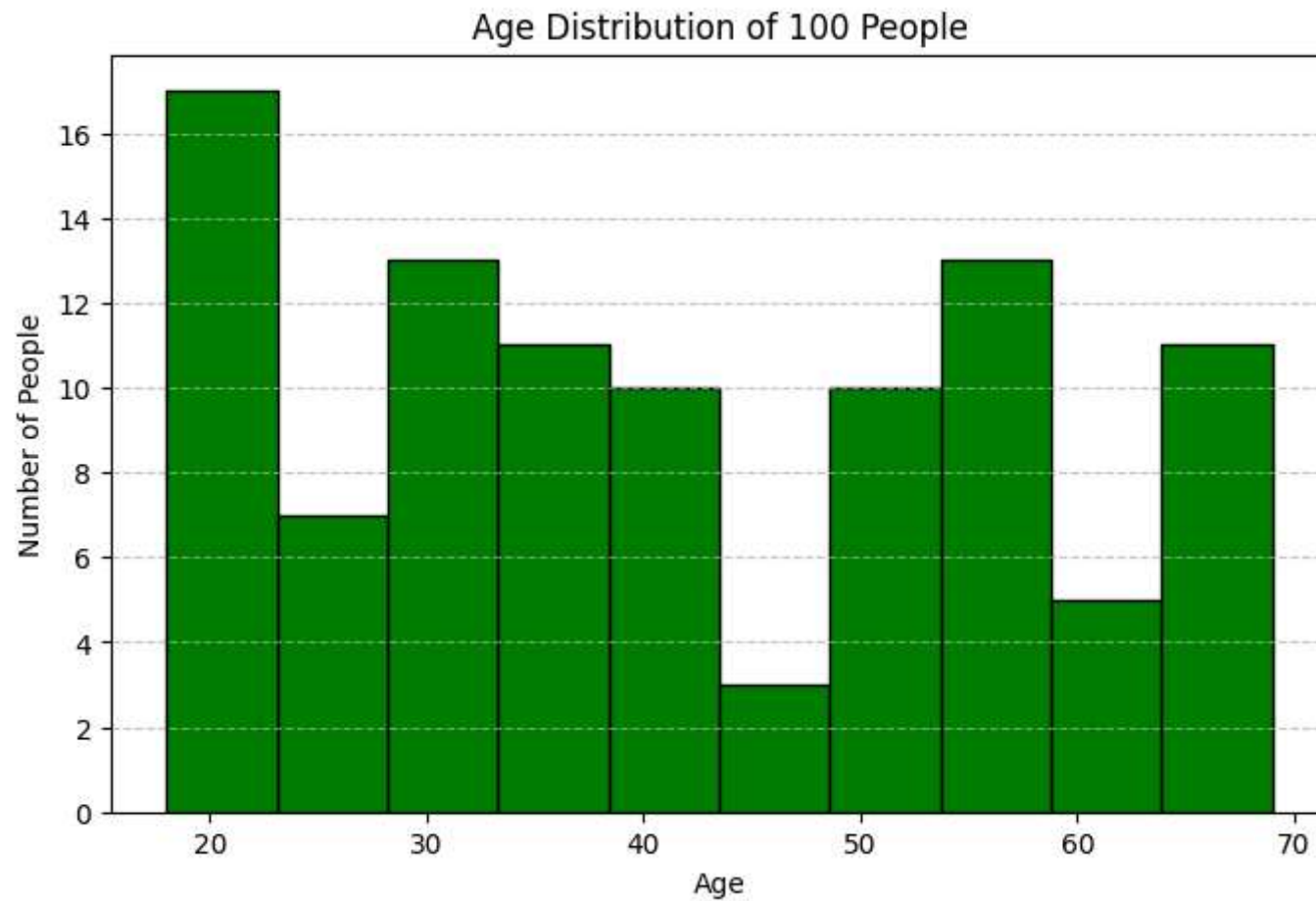
In [5]: *#3. Use scatter plot to show relationship between height and weight.*

```
import matplotlib.pyplot as plt
height = [150, 160, 165, 170, 175, 180, 185]
weight = [50, 55, 60, 65, 70, 75, 80]
plt.figure(figsize=(8,5))
plt.scatter(height, weight, color='green')
plt.title('Relationship Between Height and Weight')
plt.xlabel('Height (cm)')
plt.ylabel('Weight (kg)')
plt.grid(True)
plt.show()
```



In [13]: *#4.Create a histogram for ages of 100 people.*

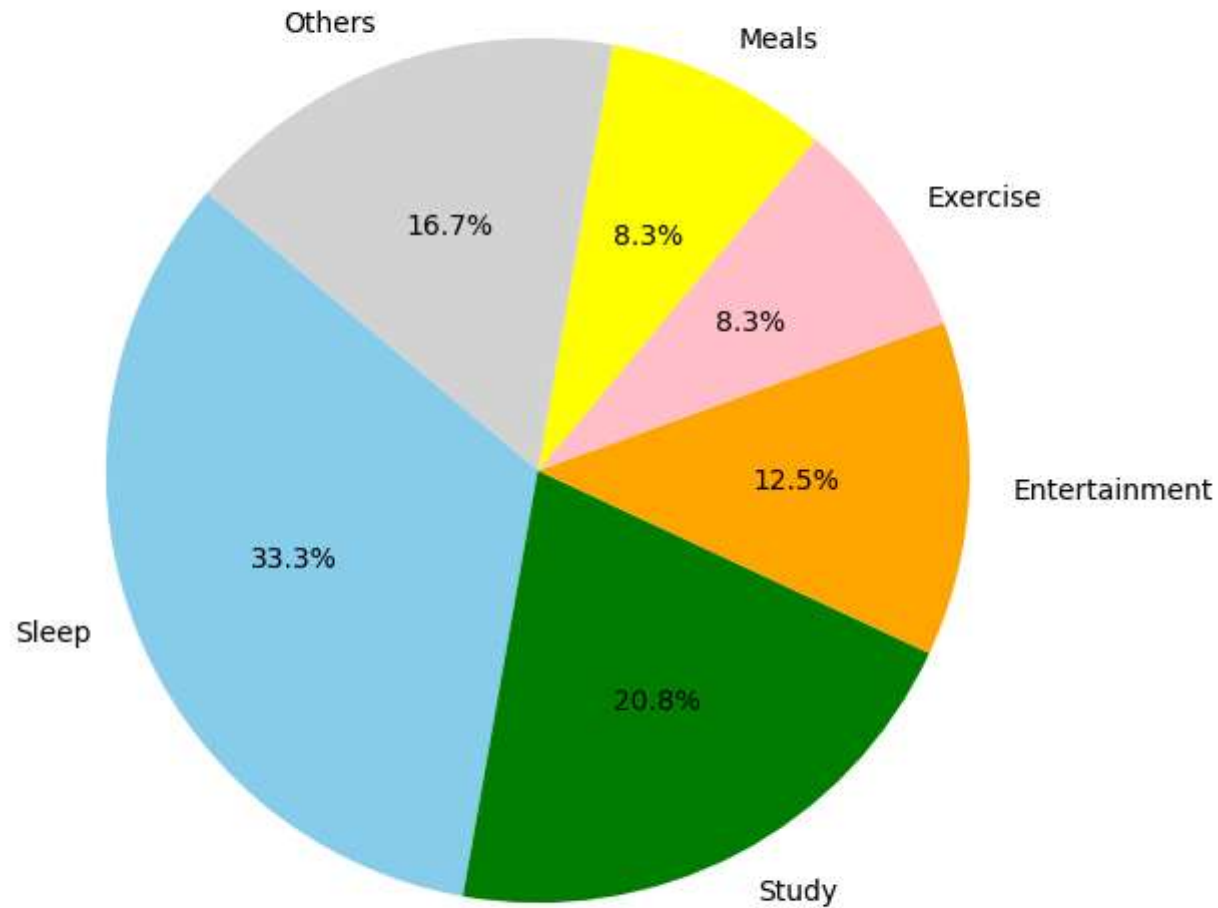
```
import matplotlib.pyplot as plt
import numpy as np
np.random.seed(0)
ages = np.random.randint(18, 70, 100)
plt.figure(figsize=(8,5))
plt.hist(ages, bins=10, color='green', edgecolor='black')
plt.title('Age Distribution of 100 People')
plt.xlabel('Age')
plt.ylabel('Number of People')
plt.grid(axis='y', linestyle='--', alpha=0.7)
plt.show()
```



In [21]: #5.Make a pie chart of daily activities (sleep, study, entertainment, etc.).

```
import matplotlib.pyplot as plt
activities = ['Sleep', 'Study', 'Entertainment', 'Exercise', 'Meals', 'Others']
hours = [8, 5, 3, 2, 2, 4]
plt.figure(figsize=(7,7))
plt.pie(hours, labels=activities, autopct='%1.1f%%', startangle=140, colors=['skyblue', 'green', 'orange', 'pink', 'yellow'])
plt.title('Daily Activities Breakdown')
plt.show()
```

Daily Activities Breakdown



In []: