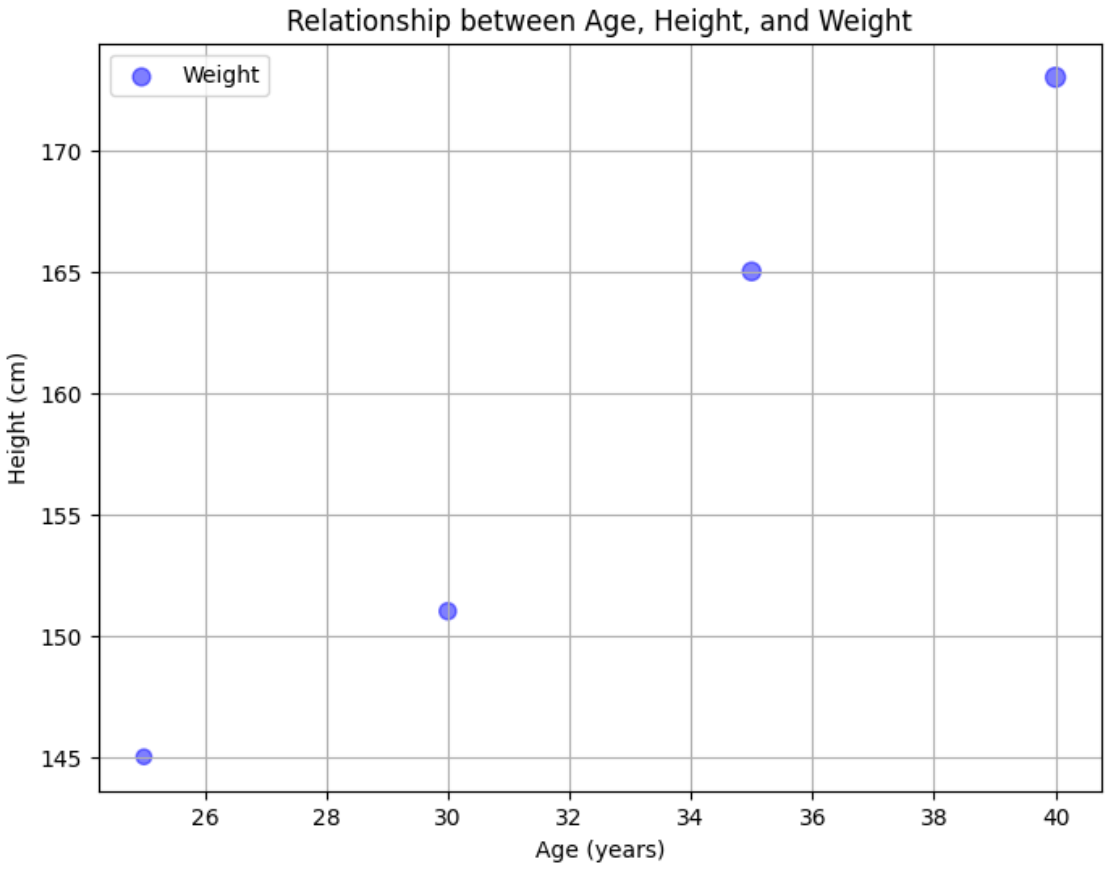
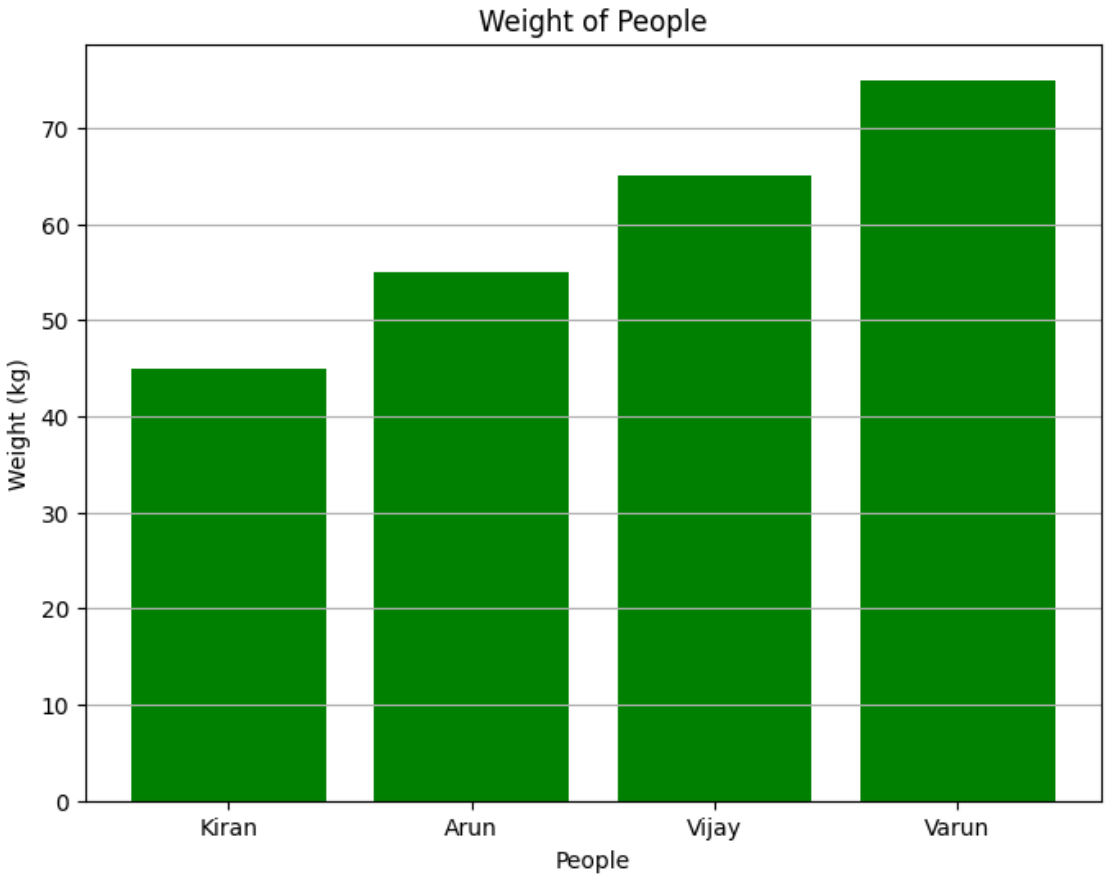
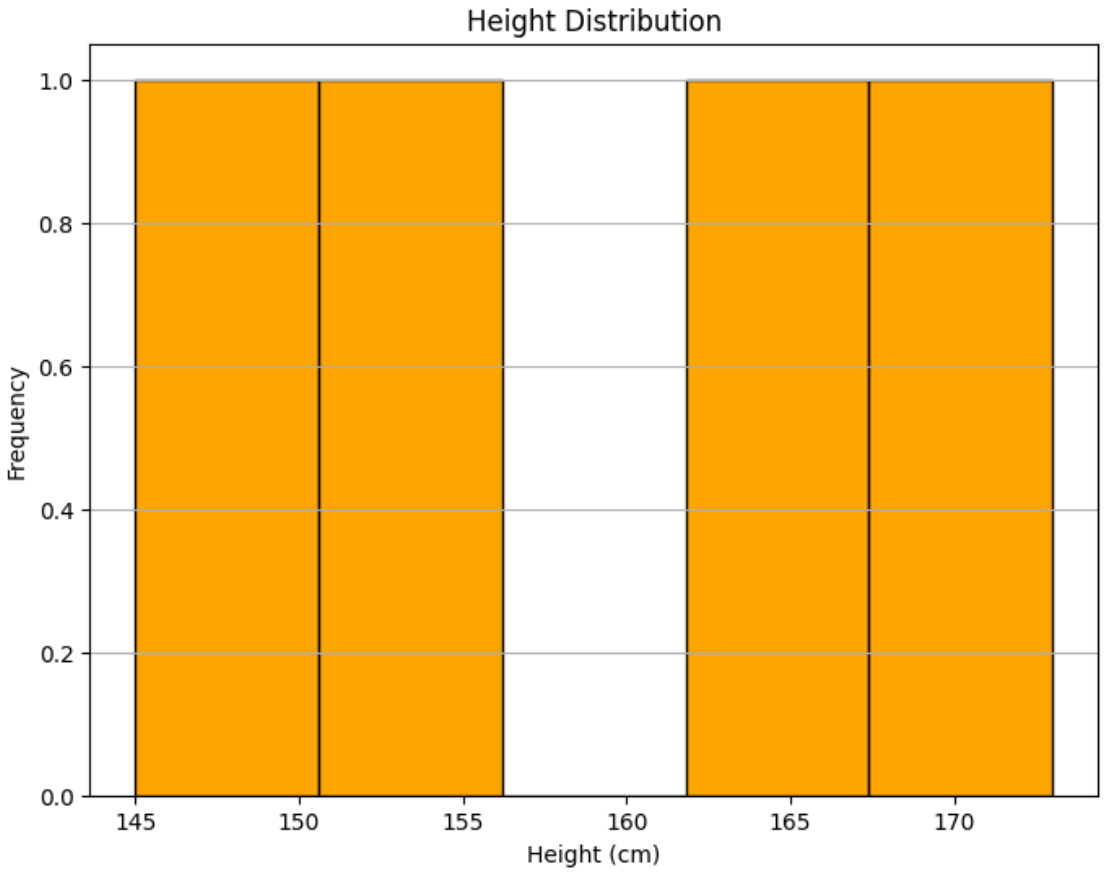
assignment-1-task-2

February 2, 2024

[1]:
```
import matplotlib.pyplot as plt

# Generated dataset
people = ['Kiran', 'Arun', 'Vijay', 'Varun']
age = [25, 30, 35, 40]
height = [145, 151, 165, 173]
weight = [45, 55, 65, 75]

# Scatter Plot
plt.figure(figsize=(8, 6))
plt.scatter(age, height, s=weight, c='blue', alpha=0.5)
plt.title('Relationship between Age, Height, and Weight')
plt.xlabel('Age (years)')
plt.ylabel('Height (cm)')
plt.grid(True)
plt.legend(['Weight'], loc='best')
plt.show()

# Bar Chart
plt.figure(figsize=(8, 6))
plt.bar(people, weight, color='green')
plt.title('Weight of People')
plt.xlabel('People')
plt.ylabel('Weight (kg)')
plt.grid(axis='y')
plt.show()

# Histogram
plt.figure(figsize=(8, 6))
plt.hist(height, bins=5, color='orange', edgecolor='black')
plt.title('Height Distribution')
plt.xlabel('Height (cm)')
plt.ylabel('Frequency')
plt.grid(axis='y')
plt.show()
```


Relationship between Age, Height, and Weight
Weight
Height (cm)
170
165
160
155
150
145
26
28
30
32
34
36
38
40
Age (years)


Weight of People
Weight (kg)
0
10
20
30
40
50
60
70
Kiran
Arun
Vijay
Varun
People


Height Distribution
Frequency
1.0
0.8
0.6
0.4
0.2
0.0
145
150
155
160
165
170
Height (cm)