Assignment - 1

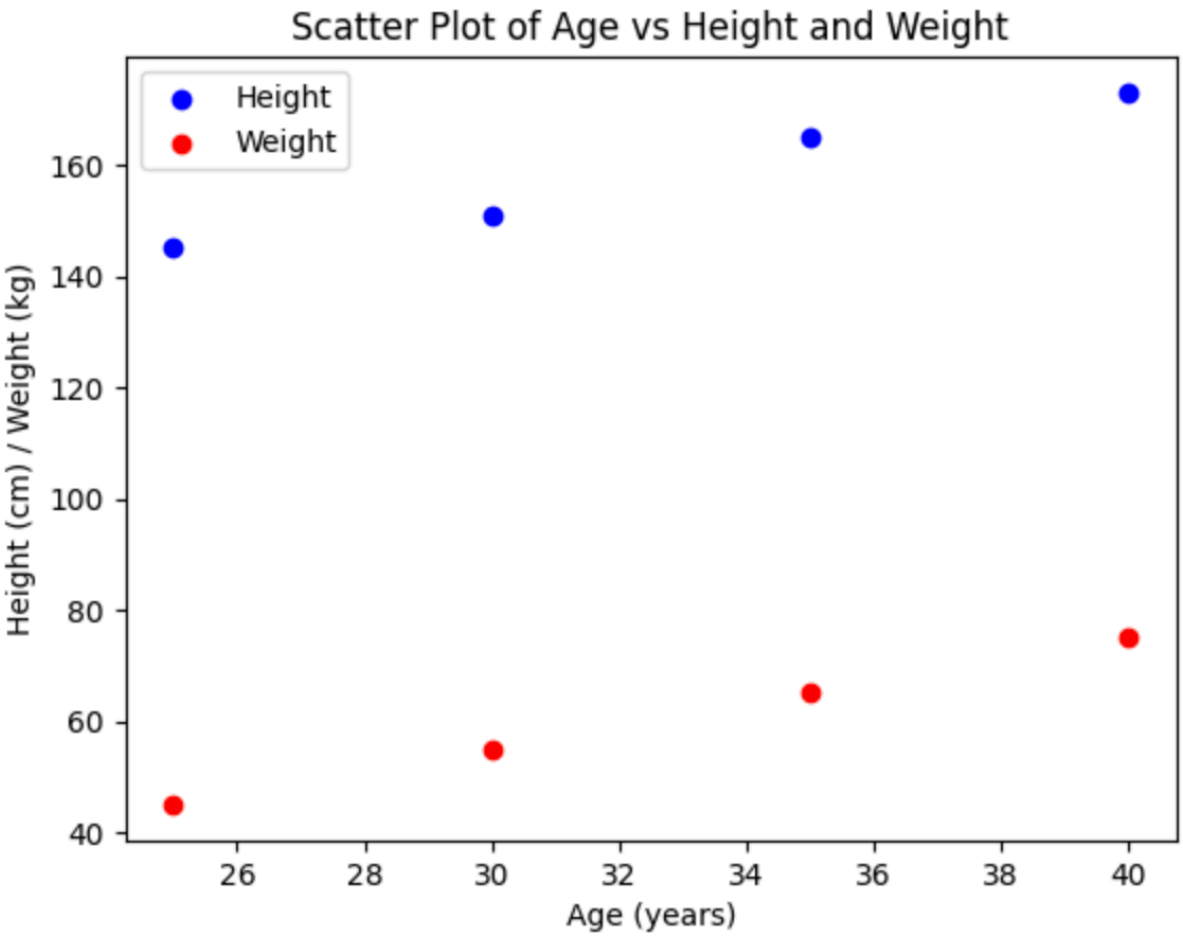
B.Rithwik
2303A52330
Batch - 35

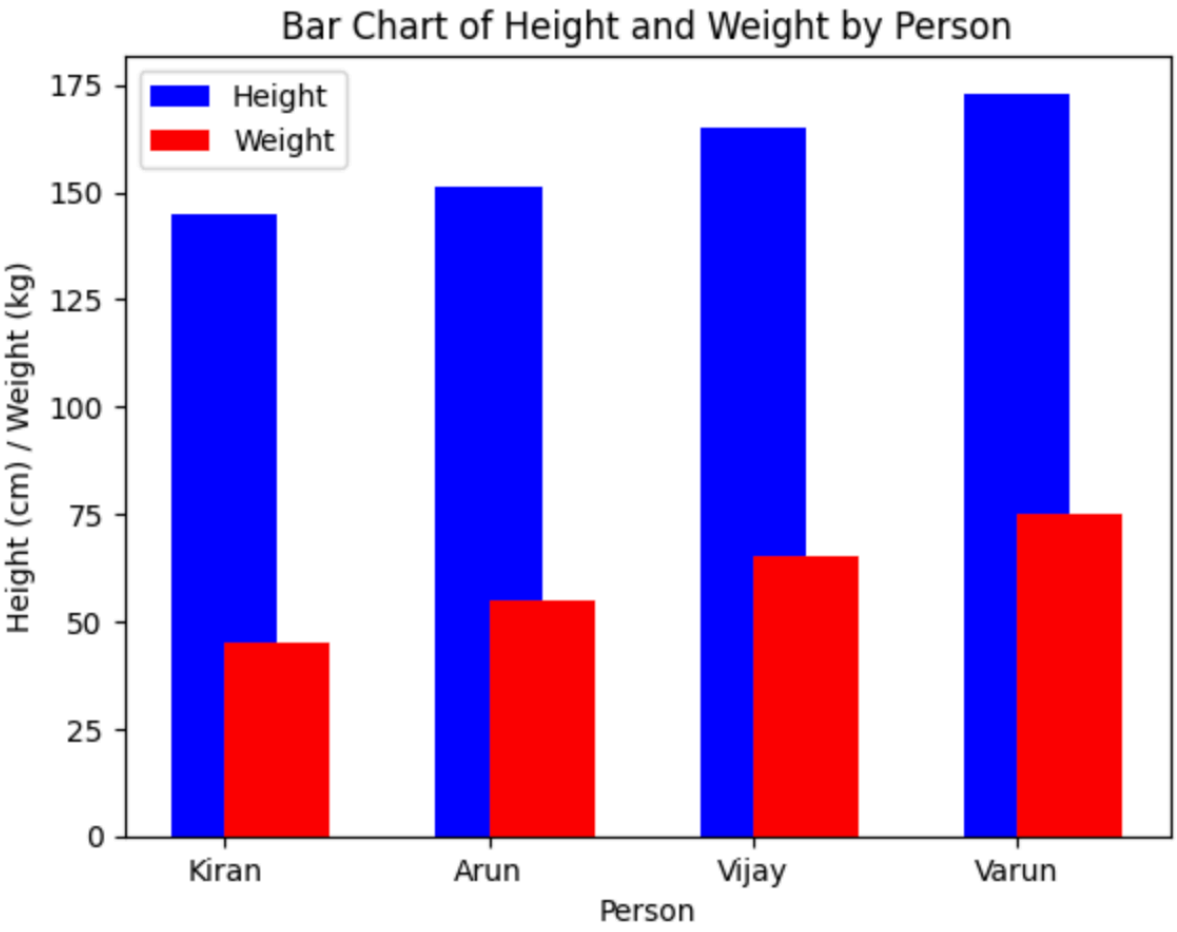
Code -

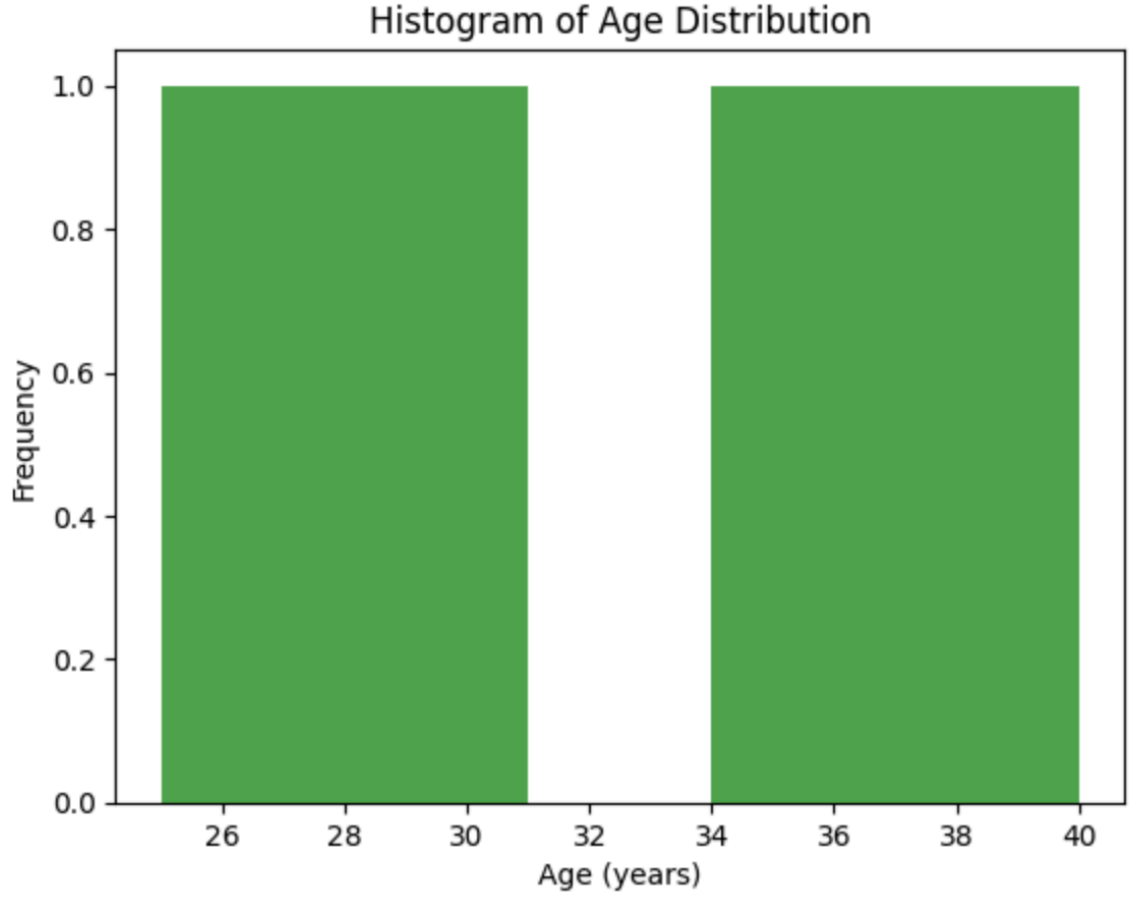
```
import matplotlib.pyplot as plt

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

# Scatter Plot - Age vs Height and Weight
plt.scatter(age, height, color='blue', label='Height')
plt.scatter(age, weight, color='red', label='Weight')
plt.title("Scatter Plot of Age vs Height and Weight")
plt.xlabel("Age (years)")
plt.ylabel("Height (cm) / Weight (kg)")
plt.legend()
plt.show()

# Bar Chart - Comparing Height and Weight of People
x = range(len(people))
plt.bar(x, height, width=0.4, label='Height',
color='blue', align='center')
plt.bar(x, weight, width=0.4, label='Weight',
color='red', align='edge')
plt.title("Bar Chart of Height and Weight by Person")
plt.xlabel("Person")
plt.ylabel("Height (cm) / Weight (kg)")
plt.xticks(x, people)
plt.legend()
plt.show()

# Histogram - Distribution of Age
plt.hist(age, bins=5, color='green', alpha=0.7)
plt.title("Histogram of Age Distribution")
plt.xlabel("Age (years)")
```

```
plt.ylabel("Frequency")
plt.show()
```

OUTPUT -




Bar Chart of Height and Weight by Person
Height
Weight
175
150
125
100
75
50
25
0
Height (cm) / Weight (kg)
Kiran
Arun
Vijay
Varun
Person


Histogram of Age Distribution
1.0
0.8
0.6
0.4
0.2
0.0
Frequency
26
28
30
32
34
36
38
40
Age (years)