6.

I. Construct Bar Graph

100 students were asked what their primary mode of transport for getting to school was. The results of this survey are recorded in the table below.
Construct a bar graph representing this information.

Mode of Transport	Student Count
Walking	30
Cycling	12
Car	18
Bus	36
Train	4

X axis - Mode of Transport, Y axis – Student Count, Title – Students Transportation

Bar width – 0.4, color – cyan

```
import matplotlib.pyplot as plt

import numpy as np

plt.title('Students transportation')

plt.xlabel('Mode of Transport')

plt.ylabel('Student Count')

x = np.array(['Walking','Cycling','Car','Bus','Train'])

y = np.array([30,12,18,36,4])

plt.bar(x, y, color="c",width = 0.4)

plt.show()
```

II. Create a histogram for the given data with a bin size of 5.

Age of 30 people:
5,12,18,22,25,27,26,30,34,38,39,40,42,46,45,47,49,51,56,53,67,68,64,62,70,72,74,76,77,80

```
import matplotlib.pyplot as plt

ages =
[5,12,18,22,25,27,26,30,34,38,39,40,42,46,45,47,49,51,56,53,67,68,64,62,70,72,74,76,77,80]
plt.hist(ages, bins=5, color='g', edgecolor='black')
plt.title('Age Distribution')
plt.xlabel('Age Ranges')
plt.ylabel('Frequency')

plt.show()
```