3. Scenario: You are working on a project that involves analyzing a dataset containing information about houses in a neighborhood. The dataset is stored in a CSV file, and you have imported it into a NumPy array named house\_data. Each row of the array represents a house, and the columns contain various features such as the number of bedrooms, square footage, and sale price.

Question: Using NumPy arrays and operations, how would you find the average sale price of houses with more than four bedrooms in the neighborhood?

Program:

#3

df=pd.read\_excel(r"C:\Users\hares\Downloads\house\_data.xlsx")

house\_data=df.to\_numpy()

Bedrooms\_more\_than\_four=house\_data[house\_data[:,0]>4]

avg\_price = np.mean(Bedrooms\_more\_than\_four[:,2])

print("Bedrooms more than 4 : ",Bedrooms\_more\_than\_four)

print("Average price of bedrooms more than 4 : ",avg\_price)

output:

Bedrooms more than 4 :

[[ 5 2200 450000]

[ 6 2500 600000]

[ 7 2800 750000]]

Average price of bedrooms more than 4 : 600000.0

Dataset:

[[ 3 1500 250000]

[ 4 1800 300000]

[ 5 2200 450000]

[ 2 1300 200000]

[ 6 2500 600000]

[ 3 1600 220000]

[ 7 2800 750000]

[ 4 2000 350000]]