

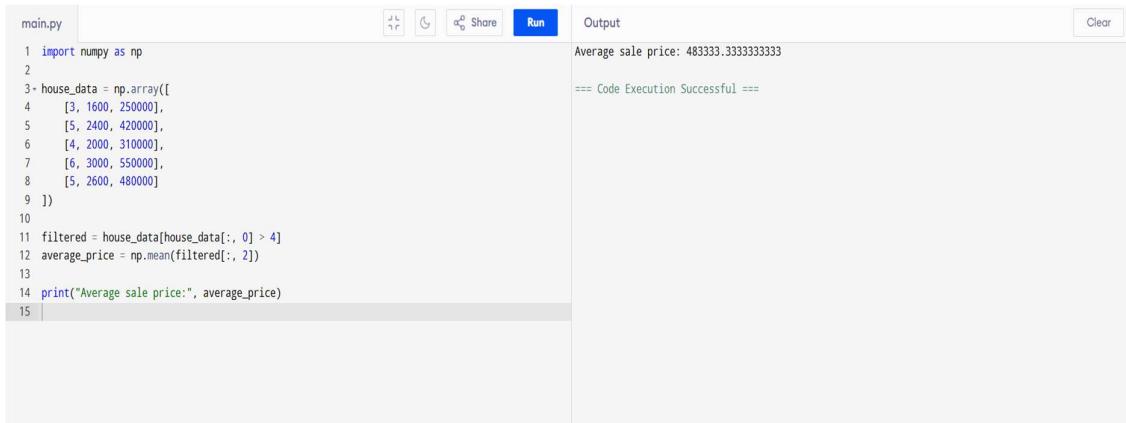
Scenario: You are working on a project that involves analysing a dataset containing information about houses in a neighbourhood. The dataset is stored in a CSV file, and you have imported it into a NumPy array named house data. Each row of the array represents a house, and the columns contain various 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 neighbourhood?

AIM: To find the average sale price of houses having more than four bedrooms using NumPy filtering operations.

PROCEDURE:

1. Create a NumPy array storing bedrooms, area, and price.
2. Filter rows where the number of bedrooms is greater than four.
3. Extract the sale price column from the filtered rows.
4. Use np.mean() to find the average sale price.



The screenshot shows a Jupyter Notebook interface with a code cell titled 'main.py' and an output cell. The code cell contains Python code to import numpy, define a house data array, filter rows for more than 4 bedrooms, and calculate the average price. The output cell shows the result as 483333.3333333333 and a success message.

```
main.py
1 import numpy as np
2
3 house_data = np.array([
4     [3, 1600, 250000],
5     [5, 2400, 420000],
6     [4, 2000, 310000],
7     [6, 3000, 550000],
8     [5, 2600, 480000]
9 ])
10
11 filtered = house_data[house_data[:, 0] > 4]
12 average_price = np.mean(filtered[:, 2])
13
14 print("Average sale price:", average_price)
15 |
```

Average sale price: 483333.3333333333
== Code Execution Successful ==