Question3:

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?

Answer

Code:

import numpy as np

import pandas as pd

try:

df = pd.read\_csv(r"C:\Users\jampa\OneDrive\文档\house\_data.csv")

house\_data = df.to\_numpy()

houses\_more\_than\_4\_bedrooms = house\_data[house\_data[:, 0] > 4]

if houses\_more\_than\_4\_bedrooms.size > 0:

sale\_prices = houses\_more\_than\_4\_bedrooms[:, -1]

average\_sale\_price = np.mean(sale\_prices)

print(f"Average sale price of houses with more than 4 bedrooms: ${average\_sale\_price:,.2f}")

else:

print("No houses with more than 4 bedrooms found.")

except FileNotFoundError:

print("Error: The file was not found. Please check the file path.")

except Exception as e:

print(f"An error occurred: {str(e)}")

Output:

