Question 1

You are going to design a program, which calculates room charges for a certain hotel. The room types available are Delux-Double, Standard-Family and Standard-Single. The room charge depends on the facilities required.

Design a **RoomChargeCalculator** class with the following methods.

Method **getChargeDeluxDouble** that accepts the true/false for the following parameters.

balcony, parking, tv, kitchen, wifi

Use the following details to calculate the fee.

Fixed fee = 5000

Additional chargers if the following were requested,

Balcony – 500

Parking – 200

Tv -200

Kitchen – 1000

Wifi - 100

Method **getChargeStandardFamily** that accepts the true/false for the following parameters.

parking, kitchen, garden

Use the following details to calculate the fee.

Fixed fee = 3000

Additional chargers if the following were requested,

Parking – 200

Kitchen – 500 garden

- 200

Method **getChargeStandardSingle** that accepts the true/false for the following parameters.

parking, ac, wifi

Use the following details to calculate the fee.

Fixed fee = 2000

Additional chargers if the following were requested,

Parking – 200 Ac

– 500

wifi – 100

write a program, which displays the following menu and responds to the user's selection:

Room Charge Calculator

1. Delux-Double

2. Standard-Family

3. Standard-Single

4. Quit

Enter your choice (1-4):

Display an error message if the user enters a number outside the range of 1 through 4 when selecting an item from the menu.

Question 2

Implement a class named RandNum. The class should have a 5x5 2D array of 25 integers. The constructor should use the random() function to generate a random number in the range of 1 to 100 for each element in the array.

Implement a method to calculate the minimum, maximum and average of the 25 values.

Implement a method to display the values of the array, minimum, maximum and average of the 25 values.

Implement a class called MyMain with the main method and demonstrate the RandNum class.