## **Programming 1 Assignment 3.**

Due Date: 27 September 2024.

## Submit the .java file containing your solution to Lea.

## **Assignment 2 Question 1(For reference purposes)**

Write a program that simulates rolling a pair of dice. You can simulate rolling one die by choosing one of the integers 1, 2, 3, 4, 5, or 6 at random. The number you pick represents the number on the die after it is rolled. The expression

```
(int) (Math.random()*6) + 1
```

does the computation to select a random integer between 1 and 6. You can assign this value to a variable to represent one of the dice that are being rolled. Do this twice and add the results together to get the total roll. Your program should report the number showing on each die as well as the total roll. For example:

```
The first die comes up 3
The second die comes up 5
Your total roll is 8
```

## **Question to Solve for Assignment 3**

Continuing with Assignment 2 Question 1 which is pasted above for reference purposes, your task is to turn it into a dice game. Below are the rules of the game:

1. User gets 3 rolls (rounds). For each round, user will first guess what they might get when both dice are rolled (You read in two numbers from the user). After which your program rolls both dice (generates two random numbers as done in previous assignment).

When any of the following next 3 things happen, the user has won the game:

- 1. The user guessed both numbers(rolls) correctly at any of the 3 rounds
- 2. The user rolled the same number in both dice (the 2 random numbers generated at a round were the same)
- 3. User rolled a total sum of 6 (the 2 random numbers generated at a round sums up to 6).
  - Display a congratulatory message. Otherwise if the user rolls all 3 rounds and none of the 3 above happened, then inform the user that they have lost the game.