# Module 5 Lab Instructions

In this lab assignment, you are expected to develop a dice rolling application, in which the user competes against the computer.

As explained below, there are two options that you can choose from to implement for this assignment.
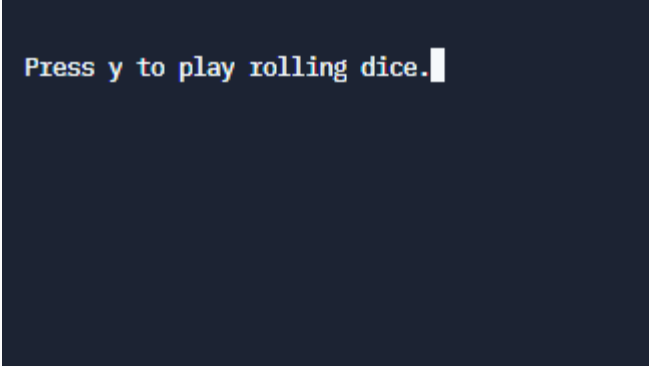
You can follow your own strategy and logic to program the applications. Just make sure that you use *while* loop somewhere in your code.

## 1st Option

In the first option, the dice rolls for both the user and computer are automatic. You need to use the **random** package to generate two numbers (one for user and one for computer), which will be outputs of the dice rolls.

How the program should function is visually explained as follows.

1. The program should ask the user to roll the dice as shown below.

2. The user should press '`y`' key in the keyboard, to roll the dice for both computer and the user in total for **5 times** (here you should use _while_ loop).

For each roll (which means each iteration of while loop), the program should output the winner along with the dice numbers for both user and computer. An example output might be (also check the image below):

Draw no winner! 2 vs 2
User wins! 3 vs 1
User wins! 5 vs 3
Computer wins! 5 vs 4
User wins! 4 vs 1

Then, a report about the results should be printed as shown in the image below.

```
Press y to play rolling dice.y

Draw, no winner! 1 vs 1
User wins! 5 vs 2
User wins! 6 vs 4
Computer wins! 5 vs 3
User wins! 6 vs 2

Reporting the results:
Total number of dice rolls: 5
The user won 3 times.
The computer won 1 times.
The draws were 1 times.

Press y to play rolling dice.
```

3. The user can choose to play another round by pressing y (you should use while loop to allow playing the game many times until the user decides to quit).

```
Press y to play rolling dice.y

Draw, no winner! 1 vs 1
User wins! 5 vs 2
User wins! 6 vs 4
Computer wins! 5 vs 3
User wins! 6 vs 2

Reporting the results:
Total number of dice rolls: 5
The user won 3 times.
The computer won 1 times.
The draws were 1 times.

Press y to play rolling dice.y

Computer wins! 5 vs 3
Draw, no winner! 4 vs 4
User wins! 6 vs 5
Computer wins! 6 vs 4
User wins! 5 vs 4

Reporting the results:
Total number of dice rolls: 5
The user won 2 times.
The computer won 2 times.
The draws were 1 times.

Press y to play rolling dice.
```

4. The user can press any key other than y to quit the game.

```
Press y to play rolling dice.

The game has ended.
>
```