Report

Game 1

Description

This is game is about a dice game where two six sided dice are rolled and output will display a message in the following format:

- If the sum of two dice are above 7: “Better than 7”
- If the sum of two dice are below 7: “Worse than 7”
- If the sum of two dice are equals to 7: “Exactly 7”

Messages will display.

Solution

First my program displays a message in console whether to run the test cases or run the game.

In test cases:

It just has 3 test cases in the order of assignment given.

First test case displays whether the sum generated by the two dice are 7 or above 7 or below 7

Second test case displays whether all the possible test cases are there. That means 36 cases should be there I just displayed it in the console.

I just the random number from two lists which has numbers from 1 to 6, so that no need to check whether a number is between 1 and 6 inclusive.

In the third test case it just runs 36000 test cases, and display the number of occurrences of the sum from 2 to 12.

In Game:

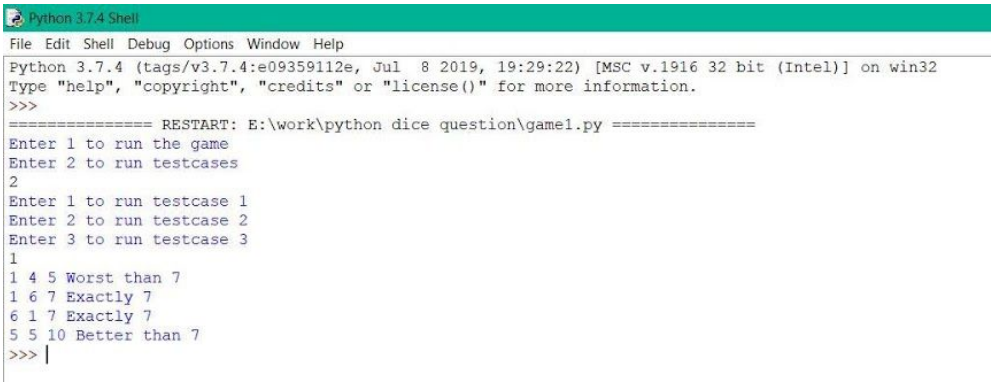
It asks for two inputs that means It displays a message like “Enter 1 to roll the die”

If the user enters 1 then it will display the message related to the sum generated by selecting two random numbers for dice 1 and dice 2.

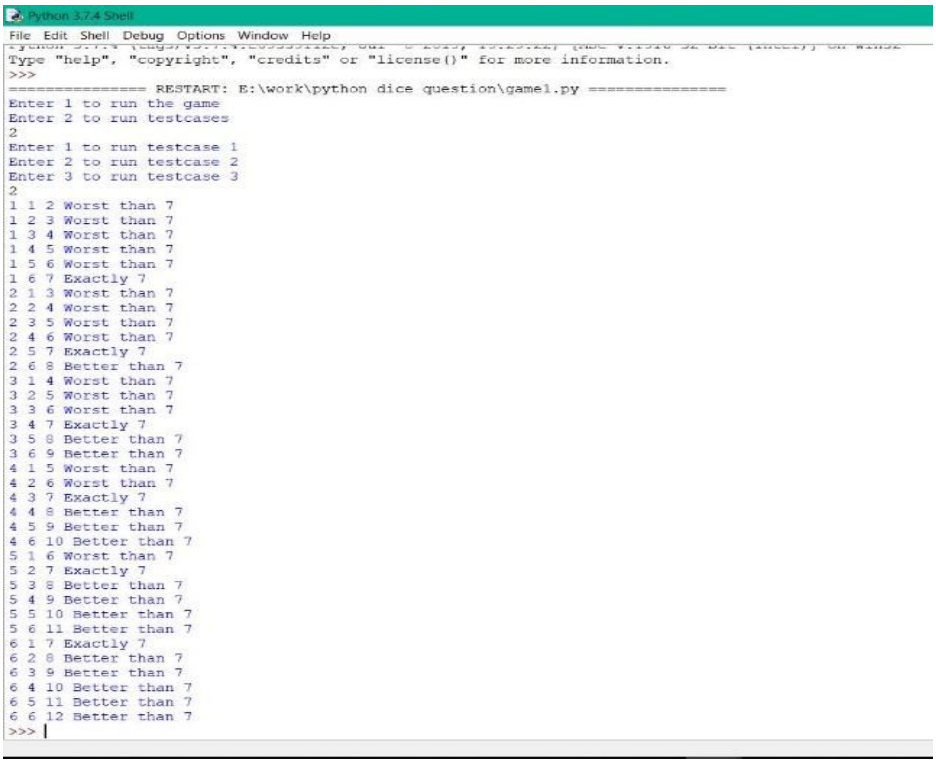
If the user enters 0 as the input then it will end the game.

Screenshot of output

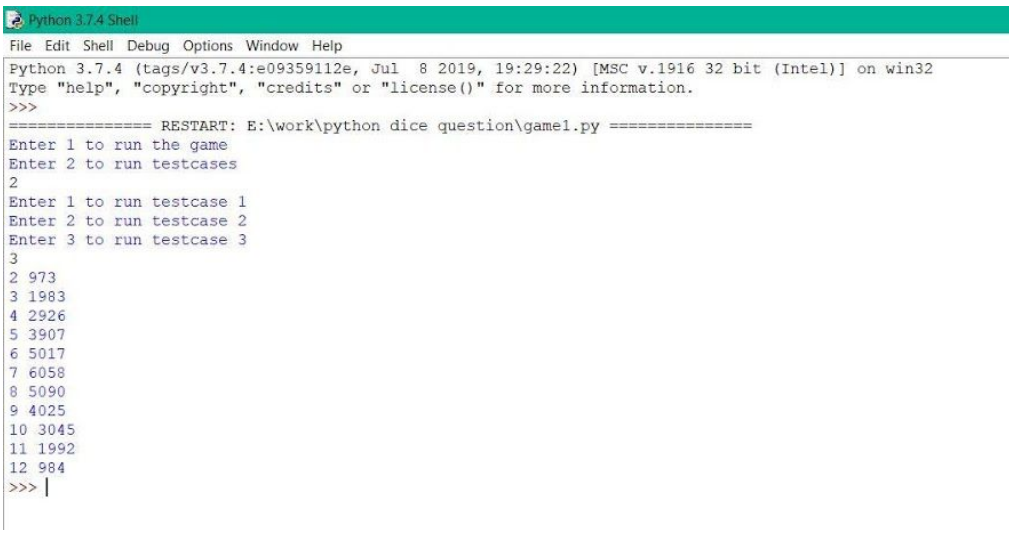
Test case 1



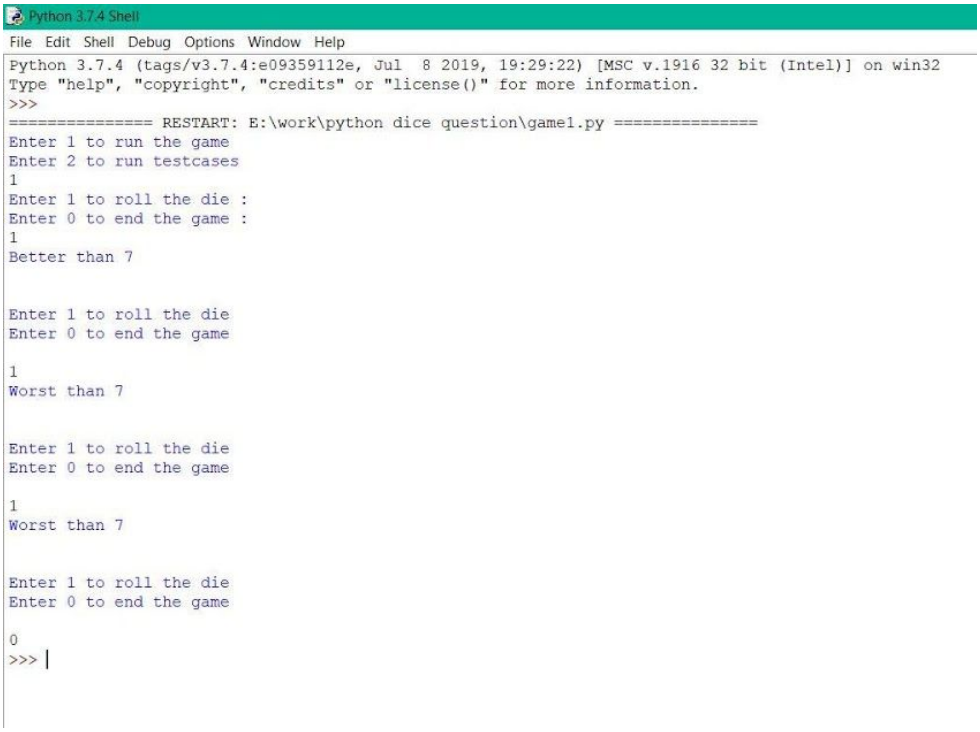
Test Case 2



Testcase 3



Game Run



Explanation of how random numbers are selected

Created two lists as list1 and list2 which have elements as [1,2,3,4,5,6]

Using the random library I randomly select a number from the list using random.choice() function.

Game 2

Description

This game is about a card game where three cards are selected randomly and the sum of the three cards are taken by considering the values assigned to them according to the following format.

- Cards between 2-10 has their own face value
- All other cards except Ace has a value of 10
- Ace has a value of 13

The winner is selected considering the sum

- If the sum is 33 - Winner
- If the sum is greater than 33 - Too high you loose
- If the sum is in range 28-32 - A good total
- If the sum is lower than 28 - You still might win

Messages will display accordingly.

Solution

You can find three test cases (files) in the directory.

Tes Case File 01 :

Select three random cards

Display the cards selected

Print the total value

Print the message

Test Case File 02:

Process will be similar to Test Case 01 with the following condition prevails

The three cards selected should be different to each other (Both the value and the face)

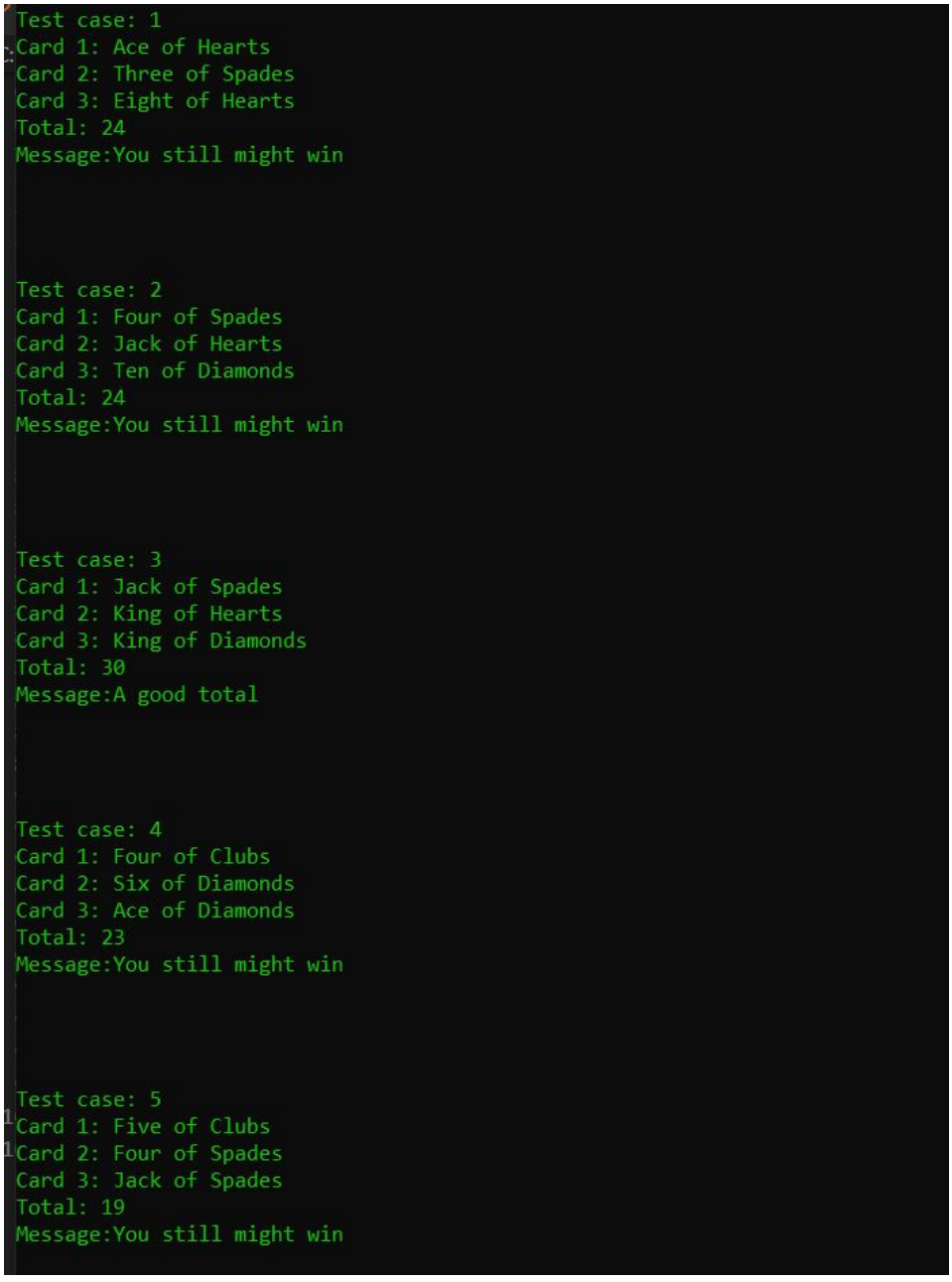
Test Case File 03:

Process will be similar to Test Case 02 with the following condition prevails

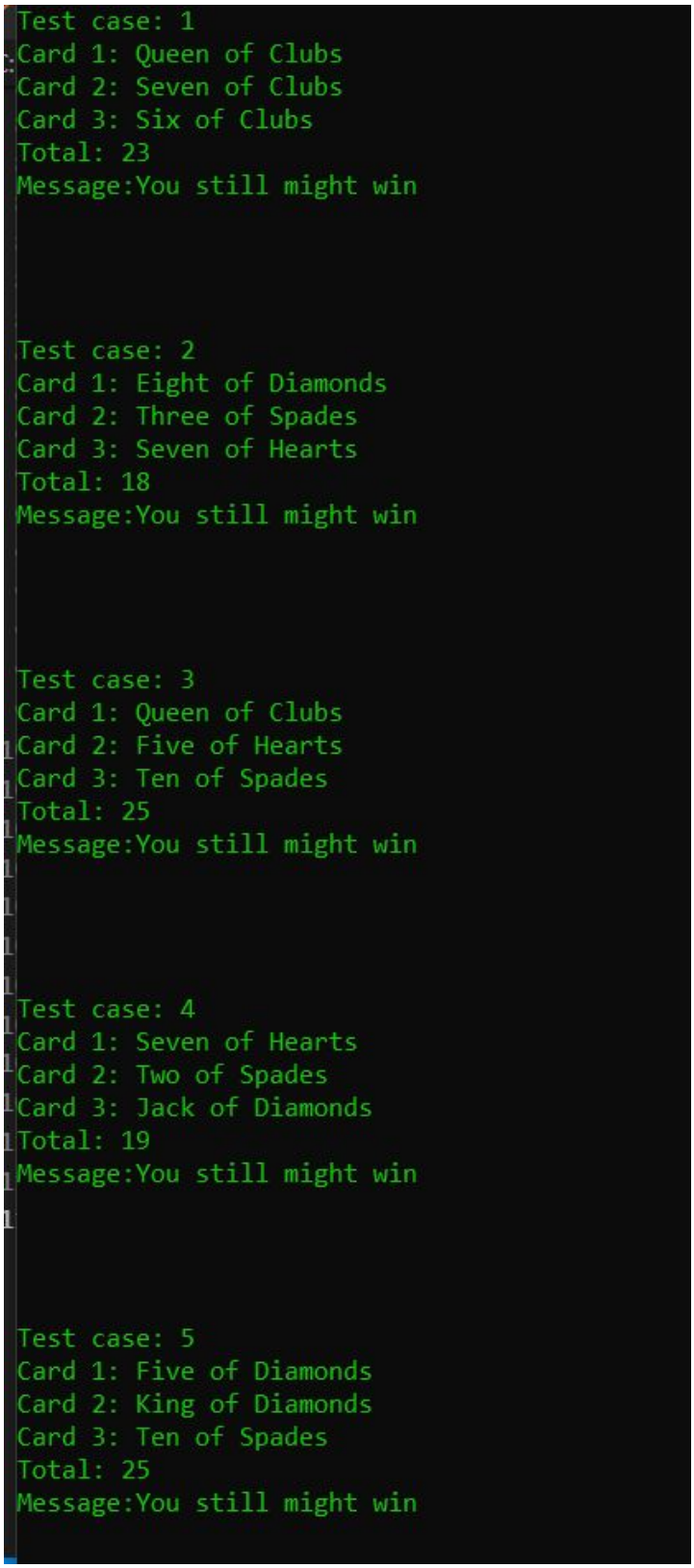
The program runs 10000 times and the count of wins will be printed (Winner)

Screenshot of output

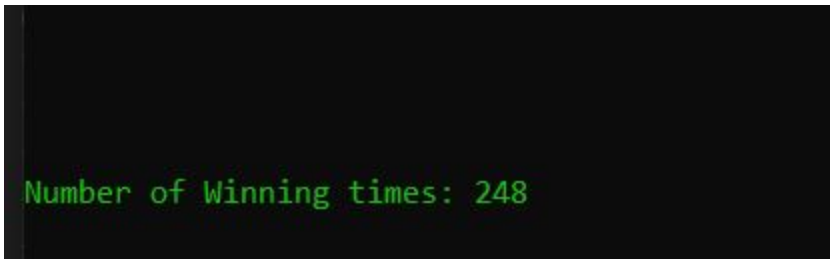
Test case 1



Test case 2


Test case: 1
Card 1: Queen of Clubs
Card 2: Seven of Clubs
Card 3: Six of Clubs
Total: 23
Message:You still might win
Test case: 2
Card 1: Eight of Diamonds
Card 2: Three of Spades
Card 3: Seven of Hearts
Total: 18
Message:You still might win
Test case: 3
Card 1: Queen of Clubs
Card 2: Five of Hearts
Card 3: Ten of Spades
Total: 25
Message:You still might win
Test case: 4
Card 1: Seven of Hearts
Card 2: Two of Spades
Card 3: Jack of Diamonds
Total: 19
Message:You still might win
Test case: 5
Card 1: Five of Diamonds
Card 2: King of Diamonds
Card 3: Ten of Spades
Total: 25
Message:You still might win

Test case 3



Explanation of how random Card are selected

Created a list as cards which have elements as
[“Two”,”Three”,”Four”,”Five”,”Six”,”Seven”,”Eight”,”Nine”,”Ten”,”Jack”,”Queen”,”King”,”Ace”]

Using the random library I randomly select a number using random.randint(0,12) function.

Then I am selecting the corresponding list element to that random value generated.

Again I generate another number between 0 and 3 then according to that number I return a value

0 - Spades

1-Hearts

2-Diamonds

3-Clubs

Then using these two values I return a random card in the card pack.

Ex: first number - 7

second number - 2

output:

Eight of Diamonds