## Assignment 9 writeup

We have created class PlayYahtzee class. PlayYahtzee is the main class to start the server. Every time PlayYahtzee class is called, it will create CmdParser to handle the input arguments. Then using the information from input arguments, we create a client -Yahtzee Client that takes up hostname-localhost and port number, and creates a socket connection. And then runServer() method is called. And because of this method, stream connection is made between client and server. And until strings from socket is null, we will keep on taking response from client again and again and those responses will then passed to the server and server will keep on adding total points for players. And after we get null from server, we will check whether class server has send "Game Over" signal to client and we finish the process accordingly.

## How testing is performed?

In this assignment, we used mocking- specifically-Mockito framework.

We mocked server and checked execution for choose-dice, choose-score, print-frame and round-over as well. In order to test the client class, we mock the client socket and server socket and connect them. Then we check the correctness of how the client handle different message frames from server by testing giving different server message input to ServerInfoHandler. We override setReader() method to choose the inputstream and using ByteArrayInputStream to mock user's input. Then we can assert whether this handler handles server information and user's input correctly.

## How are we handling errors and exceptions?

In this assignment, we don't have to worry about server side validation. But we have performed client side validation. And in this assignment user is the one from which we take entry thus, validation is important. So, while user enters dice point etc, we check if what user entered is a number between 1 and 5. If a user enters some negative integer, we print that this number is not right and we ask for input again. And the same is true for the case in which user enters some string or some special characters.

