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# BESE-4A

# Assignment 2

## Introduction:

In this Assignment we have to create snake and Ladders game. In which board size is 10 \* 10.

Rules of Game:

* Players are 2-4
* Possible outcomes on dice are 1-6.
* If output is 6 then current player will get a chance again to throw the Dice.
* If player positioned on mouth of snake then his current position will change to tail of snake, and he will not get other chance until he throws a dice which has value 6.
* If player positioned at below of ladder then His current position will change to topmost position of ladder and he will get another chance to throw the dice again.
* If player's current position+ roll >100 then the other player will get a chance to throw the dice.
* Any player reaching 100 earlier than the other player will be the winner and the game will end.

## How to Play:

To run code open Eclipse/Netbeans and add java project. Copy given classes.

* Compile AP\_Assignment2 class.
* Main GUI will be shown. Here select total number of Players.
* After selecting total number of players, Players name text field will become editable according to total players. Write their names and start game.
* After that game GUI will be shown.
* Initially all tokens will be out of board.
* First player will get a chance to play game. He has to click on roll dice. Possible outcome of his roll will be shown on dice below that button and his token will move to that position. If he got 6 on dice then he will get another chance to play. If his token’s position is at start of ladder then he will also get another chance. If his token’s position is at mouth of snake then his position will be updated to tale of that snake. His token will be moved only when he shows 6.
* After this second player will get a chance to play game.
* Similarly all players will play in same way.
* Tokens of all players are of that color in which color his name appears.
* Player will only win if he touches 100 i.e on reaching 99 he has to show 1 to win. He will stay there until he shows 1.
* To run test cases run AP\_Assignment2Test.

## Novelty:

* There is beautiful and user friendly GUI in this game.
* Very beautiful board, dice and tokens.
* There is common button for every player which is shown according to user turn.
* Feedback is also shown below that button i.e you hit ha ladder, play again or you hit a snake etc.
* Same color for user name and tokens

## What Learnt?

I learnt how to build app in java. How to use JFrame, JPanel, images in building such a beautiful app. How to show image or button on another image. How to set different text sizes and colors on runtime.

## Github link:

https://github.com/Muhammad-Shehzad/AP\_Assignment2\_Snakes&Ladders