

# Snakes And Ladders

The aim of this project is to play text-based snake and ladder game in the terminal. However, it is a fun thing to do for a beginner in order to learn how to use multiple concepts in your program.

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## Technologies

- Python : 3.8.2
- Flake8(for linting)

## Requirements

- Use of Random function
  - Conditional Statements
-

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## Setup

To run this project

- Clone the repo
- Install python
- Install flake8 library :
  - Pip install flake8
  - Go to root file
  - Run python -m flake8 command and check for any errors
- Import all the library functions required

## Steps Involved

### Rules of the game

- The board will have 100 cells numbered from 1 to 100.
- The game will have a six sided dice numbered from 1 to 6 and will always give a random number on rolling it.
- Each player has a piece which is initially kept outside the board (i.e., at position 0).
- Each player rolls the dice when their turn comes.
- Based on the dice value, the player moves their piece forward that number of cells.
- Ex: If the dice value is 5 and the piece is at position 21, the player will

- 
- put their piece at position 26 now (21+5).
  - A player wins if it exactly reaches the position 100 and the game ends there.

## **What happens in Game**

### **Dices rolled in game**

- 1- Display the welcome message
- 2- Collect the player's names
- 3- Until one of the player wins do the following
  - 3.1- Roll the dice
  - 3.2- Move the player forward for the value got on the dice roll.
  - 3.3- If the player is on snake's head, move down to its tail
  - 3.4- If the player is on ladder's bottom, take it to its top
  - 3.5- else remain there and let the second player roll the dice

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## Output

When Game starts it ask to press enter to start the game as shown below

```
PS C:\Users\ranga> & C:/Users/ranga/AppData/Local/Programs/Python/Python39/python.exe c:/Use

##### WELCOME TO SNAKE AND LADDER #####

##### MAIN MENU #####

Rules:
>>> Initially both the players are at starting position i.e. 0 .
    Take it in turns to roll the dice.
    Move forward the number of spaces shown on the dice.
>>> If you lands at the bottom of a ladder,
    you can move up to the top of the ladder.
>>> If you lands on the head of a snake,
    you must slide down to the bottom of the snake.
>>> The first player to get to the FINAL position is the winner.
>>> Hit enter to roll the dice.

-----SNAKES N LADDERS-----

PLEASE Press 'ENTER' to start the game:
```

Players select to play game in modes as shown below

```
-----SNAKES N LADDERS-----

PLEASE Press 'ENTER' to start the game:
Choose your mode (Single player/Multiplayer)
Enter "S" for sigle player and "M" for multiplayer: m
PLEASE Enter how many players are playing : 2
Enter player 1 name: abcd
Enter player 2 name: xyz
Good Luck!

PLEASE Press 'ENTER' to start THE GAME.█

Python 3.9.0 64 bit 110 11
```

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Each players get chance to play the game

```
PLEASE Press 'ENTER' to start THE GAME.
```

```
Its abcd turn.
```

```
Press enter to Roll the DICE
```

```
abcd DICE Rolling....
```

```
abcd got 1
```

```
abcd is now on number 1
```

```
Its xyz turn.
```

```
Press enter to Roll the DICE
```

```
xyz DICE Rolling....
```

```
xyz got 2
```

```
There's a ladder! xyz climbed up.
```

```
xyz is now on number 25
```

```
Its abcd turn.
```

```
Press enter to Roll the DICE
```