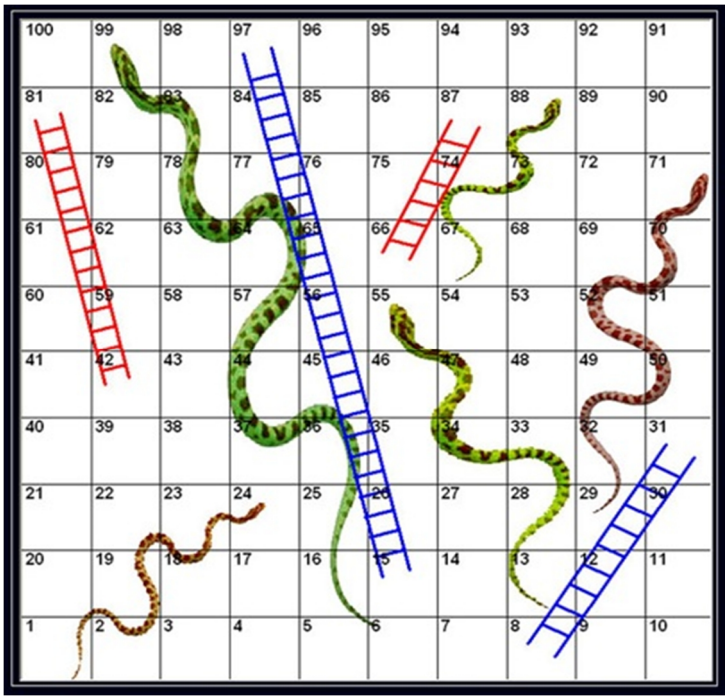
Dice Game
(Snake and ladder)



Img source: http://affordable-refinance.com/wps-wpimage.php?id=12759

Objectives:

- Practice using while loop
- Practice displaying data during the loop
- Practice simple game concept

Background:

There are several dice and board game around the world. One of the popular dice-board games is snake and ladder. In the snake and ladder board, you start from the number one and keep on moving by the number displayed by your dice until you reach 100. If your number in a throw of dice is 1 or 6, it's your turn again. If not the turn of throwing dice goes to another player. Whoever first reach the 100 position, wins the game. The presence of several snakes and ladders in the board makes the game more interesting.

Snake: if a player lands at the tip of the snake's head, his or her marker slides down to the square at the snake's tail.

Ladder: if a player lands on a square that is at the base of a ladder, his or her marker moves to the square at the top of the ladder and continues from there.

Assignment:

Make a simple dice game:

- Assign two players namely A and B. Use integers SA and SB for their score.
- Use random.randint(1,6) function for the throw of dice. You have to import 'random' module to use this function.
- Player A starts the game.
- Use while condition to continue the game until one player reaches to score 100.
- If player A reaches to 100 first, still, player B will get one chance.
- If player B reach score 100 first, Player A won't get another chance.
- In the throw of dice, if a player get number other Than 1 and 6, turn goes to the next player.
- Make the rule for snake and ladder. If a player lands on head of snake, subtract required number from the score so that he will land at tail part. Similarly, add some number to the score to make ladder. Make the rule for snake and ladder as shown in above figure.

Sample Execution:

Be sure that your program uses the exact same format as the sample executions below. This sample is without snake and ladder rule. Make sure you have added the rule for snake and ladder.

```
>>>
A= 2   SA = 2 it is turn of player B
Hit enter to throw the dice
B= 1   SB = 1 it is turn of player B
Hit enter to throw the dice
B= 2   SB = 3 it is turn of player A
Hit enter to throw the dice
A= 1   SA = 3 it is turn of player A
Hit enter to throw the dice
A= 5   SA = 8 it is turn of player B
Hit enter to throw the dice
B= 1   SB = 4 it is turn of player B
Hit enter to throw the dice
B= 6   SB = 10 it is turn of player B
Hit enter to throw the dice
B= 4   SB = 14 it is turn of player A
Hit enter to throw the dice
A= 5   SA = 13 it is turn of player B
Hit enter to throw the dice
Hit enter to throw the dice
A= 4   SA = 93 it is turn of player B
Hit enter to throw the dice
B= 1   SB = 96 it is turn of player B
Hit enter to throw the dice
B= 6   SB = 102 it is turn of player A
Hit enter to throw the dice
player B has won
```

Requirements:

- Use appropriate comments in the beginning of your code.

  # Name: ..... Lab Partner: .....
  #
  # Course: CSE 1284 Sec ? Date Assigned: .....
  #
  # File name: ..... Date Due: .....
  #
  # Program Description: Brief description of what the program does.
- Use While loop.
- Use appropriate comments throughout the program.
- Print the score of the player inside the loop.
- Make good use of whitespace.
- Once complete show the completed executing program to your TA.

Deliverables:

- Lab Report: Your lab report be completed after lab and printed out and turned in at the beginning of the next week's lab. It should follow the outline for this class (may be found on myCourses) and include:
  - Title Page
  - Flowchart
  - Sample Execution
  - Analysis and Conclusions
  - Source Code (copy and pasted into the appendix of the document)
- Source Code: Be sure to submit the source code electronically in myCourses. You may submit the file more than once before the deadline if you find and correct an error after you submitted it the first time. You may not submit a correction after the deadline however.

Grading:

Task	Points
Demo 1	**30 points**
• Proper use of game concept • Proper use of While loop **Display the scores of two players(without snake and ladder implementation)**	
• **Demo 2**	**40 points**
• Printing score in between the loop steps • Proper use of comments and white space in program • Display the proper game result with winning player. **Display the current game state every turn(implement snake and ladder completely)**	
• **Lab report**	**30 points**