

# Python Lab Basic Projects(Week8):

## 1. Guess the number:

In this game, the computer will guess a random number and the player will try to guess what number it is. The game ends when the player manages to guess the number. Display the appropriate score also.

## 2. Rock Paper Scissor:

try to solve with pseudocode:

- a) Player vs. computer.
- b) An interface with options.
- c) Checking the player against the computer.
- d) Returning the winner status.
- e) Ask if the player wants to play again.

## 3. OTP Generator:

One-time Passwords (OTP) is a password that is valid for only one login session or transaction in a computer or a digital device. Now a days OTP's are used in almost every service like Internet Banking, online transactions, etc. They are generally combination of 4 or 6 numeric digits or a 6-digit alphanumeric.


## 4. A Game of Dice

In this project, we will look at how you can emulate a player throwing a set of dice. Then we will look at how you can store these dice in a pile the player wants to keep. you write a game where you throw dice to determine the outcome, this is one way to store the results for later use. example, normal dice with six eyes. The program will work no matter how many eyes your dice have.

## 5. Hangman game in Python:

A row of dashes represents the word to guess. If the player guesses a letter in the word, the script writes it in all its correct positions. The player has 10 turns to guess the word. You can easily customize the game by changing the variables.

Sample console screen



```
d
+---+
|  o  |
| /  \ |
|      |
+---+
Missed letters: s e r t d
+---+
|  o  |
| /  \ |
|      |
+---+
Missed letters: s e r t d n
+---+
|  o  |
| /  \ |
|      |
+---+
You have run out of guesses!
After 6 missed guesses and 1 correct guesses, the word was "fox"
Would you like to play again? (y)es or (n)o
```

## **6. Generate Secure Passwords:**

fixed length, At least 12 characters long is recommended, 8 at the minimum. The combination of both upper- and lower-case letters, numbers, and symbols. Random enough that they do not contain any predictable sequence