

# Python Practice Problem

- **Level 1 :**

- Write a python program to take radius as input and print area and circumference of circle. Implement functions for both area and circumference.
- Write a python program to take a character as an input and print it is vowel or not.
- Write a python program to take a number as an input and print the table of that number.
- Write a python program to accept marks of N subjects and print the average.
- Write a python program to print the largest number among N given numbers.

- **Level 2:**

- Write a python program to take a number as an input and print if it is a prime number or not.
- Write a python program to find sum and product of digits of a given number.
- Write a python program to generate Fibonacci series (0,1,1,2,3,5....) up-to a given N terms.
- Write a python program to print the factorial of a given number.
- Write a python program to take input a number and print its digit.

- **Level 3:**

- Write a python program to swap two elements of a list.
- Write a python program to print row and column sum of a list of list.
- Write a python program to perform linear search on a list.
- Write a python program to print common elements in two list.
- Write a python to transpose a list of list.

- **Level 4:**

- Write a python program to delete duplicate elements from list.
- Write a python program to perform binary search on a given list.
- Write a python program to merge two list in increasing order.
- Write a python program to print the diamond structure.

Lines: 5

```
      1
    121
  12321
    121
      1
```

Input size of diamond in terms of number of lines and create a function to do this operation.

- Write a python program to print half pyramid structure.

1  
23  
456

Input lines by the user and create function to do that.

- **Level 5:**

- Write a python program to perform sorting on a list using selection, bubble and insertion sort. Implement separate function for each sorting technique.
- Write a python program to print multiplication of two matrix (list of list).
- Write a python program to print spiral matrix.
- Write a python program to print magic square.
- Write a python program to convert a given number to Indian number system and international number system.