# Python Basic Programs

1. Print Hello world! :
2. Declare the following variables: Int, Float, Boolean, String & print its value.
3. Program to calculate the Area Of Triangle:
4. Program to calculate area of a square.
5. Program to swap two variables:
6. Program is to check if a number is positive, negative or zero.
7. Program is to check if a number is Even or Odd.
8. Program to print Odd number within a given range.
9. Python program to find the factorial of a number.
10. Program to reverse a given number.
11. Program to find out the sum of N Natural numbers.

# Strings

1. Program to reverse a string.
2. Program to check if string is palindrome or not:
3. Python Program to Replace all Occurrences of 'a' with $ in a String from user:
4. Python Program to Count the Number of Vowels in a String Input Two Strings and Display the Larger String without Using Built-in Functions:
5. Count the number of digits & letter in a string:
6. Count Number of Lowercase Characters in a String:
7. Program to check if a Substring is Present in a Given String:

## Conditional statements

1. W. A P. which takes one number from 0 to 9 from the user and prints it in the word. And if the word is not from 0 to 9 then it should print that number is outside of the range and program should exit.
   - For example:-
   - input = 1
   - output = one
2. W. A P. to implement calculator but the operation to be done and two numbers will be taken as input from user:- Operation console should show below:-

Please select any one operation from below:-

1. To add enter 1
2. to subtract enter 2
3. To multiply enter 3
4. To divide enter 4
5. To divide and find quotient enter 5
6. To divide and find remainder enter 6
7. To find num1 to the power of num2 enter 7
8. To Come out of the program enter 8

3. W A P to check whether a year entered by user is an leap year or not?
   - Check with below input:-
     i. leap year:- 2012, 1968, 2004, 1200, 1600,2400
     ii. Non-leap year:- 1971, 2006, 1700,1800,1900

4. W A P which takes one number from the user and checks whether it is an even or odd number? If it even then prints number is even number else prints that number is odd number.

5. W A P which takes two numbers from the user and prints below output:-
   - num1 is greater than num2 if num1 is greater than num2
   - num1 is smaller than num2 if num1 is smaller than num2
   - num1 is equal to num2 if num1 and num2 are equal
   - Note: -

   1. Do this problem using if - else

   2. Do this using ternary operator

6. W A P which takes three numbers from the user and prints below output:-
   - num1 is greater than num2 and num3 if num1 is greater than num2 and num3
   - num2 is greater than num1 and num3 if num2 is greater than num1 and num3
   - num3 is greater than num1 and num2 if num3 is greater than num1 and num2
   - Note:-
     i. 1. Do this problem using if - elif - else
     ii. 2. Do this using ternary operator

7.  Write a Python program to find the length of the my_str using loop
    - Input:- 'Write a Python program to find the length of the my_str'
    - Output:- 55
8.  Write a Python program to find the total number of times letter 'p' is appeared in the below string using loop:-
    - Input:- 'peter piper picked a peck of pickled peppers.\n'
    - Output:- 9
9.  Q. Write a Python Program, to print all the indexes of all occurrences of letter 'p' appeared in the string using loop:-
    - Input: - 'peter piper picked a peck of pickled peppers.'
    - Output:-
    - 0
    - 6
    - 8
    - 12
    - 21
    - 29
    - 37
    - 39
    - 40
10. Write a python program to find below output using loop:-
    - Input: - 'peter piper picked a peck of pickled peppers.'
    - Output:- ['peter', 'piper', 'picked', 'a', 'peck', 'of', 'pickled', 'peppers']
11. Write a python program to find below output using loop:-
    - Input: - 'peter piper picked a peck of pickled peppers.'
    - Output:- 'peppers pickled of peck a picked piper peter'
12. Write a python program to find below output using loop:-
    - Input: - 'peter piper picked a peck of pickled peppers.'
    - Output:- '.sreppep delkcip fo kcep a dekcip repip retep'
13. Write a python program to find below output using loop:-
    - Input: - 'peter piper picked a peck of pickled peppers.'
    - Output:- 'retep repip dekcip a kcep fo delkcip sreppep'
14. Write a python program to find below output using loop:-
    - Input: - 'peter piper picked a peck of pickled peppers.'

- Output:- 'Peter Piper Picked A Peck Of Pickled Peppers'
15. Write a python program to find below output using loop:-
    - Input: - 'Peter Piper Picked A Peck Of Pickled Peppers.'
    - Output:- 'Peter piper picked a peck of pickled peppers'
16. Write a python program to implement index method using loop. If sub_str is found in my_str then it will print the index of first occurrence of first character of matching string in my_str:-
    - Input: - my_str = 'Peter Piper Picked A Peck Of Pickled Peppers.',
    - sub_str = 'Pickl'
    - Output:- 29
17. Write a python program to implement replace method using loop. If sub_str is found in my_str then it will replace the first occurrence of sub_str with new_str else it will will print sub_str not found:-
    - Input: - my_str = 'Peter Piper Picked A Peck Of Pickled Peppers.',
    - sub_str = 'Peck', new_str = 'Pack'
    - Output: - 'Peter Piper Picked A Pack Of Pickled Peppers.'
18. Write a python program to find below output (implements rjust and ljust) using loop:-
    - Input: - 'Peter Piper Picked A Peck Of Pickled Peppers.'
    - sub_str ='Peck',
    - Output:- '*******************Peck*******************'
19. Write a python program to find below output using loop:-
    - Input:- 'This is Python class', sep = ' is',
    - Output:- ['This', 'Python class']

20. WAP to read input from user. Allow the user to enter more numbers as long as the user enters valid integers. Terminate the program with proper message when they entered value is anything except integer.
21. WAP to read input from a user. Allow the user to enter more numbers as long as the user enters valid numbers. Terminate the program with proper message when the user enters a value anything except valid number.
22. WAP to read input from a user. Allow the user to enter more numbers as long as the user enters valid numbers. Terminate the program with proper message when the user enters a value anything except valid number. Allow wrong entry 'N' times.