

## Department of Information Technology College of Engineering and Management, Kolaghat IT Workshop Lab (PCC-CS 393) using Python

## Assignment-04 (Assignment on Function)

- 1. Write a python function **calculation()** such that it can accept two variables and calculate the addition and subtraction multiplication and floating point division of it. And also it must return all result using a single return call
- 2. Write a function **func1()** in python such that it can accept a variable number of floating point/ integer numbers and compute the sum of these numbers and print the sum in the main program.
- 3. Create a python function **showEmployee()** in such a way that it should accept employee name, and it's basic salary and display both, name and gross salary and if the salary is missing in function, it takes default basic salary as 20000. [ Gross salary =basic + DA (60% of basic) +HRA (12% of Basic)]
- 4. Write a recursive function in python to calculate the sum of numbers from 0 to n
- 5. Write a python function to find out maximum and minimum from the variable length of integer arguments.
- 6. Write a python function to find out the factorial of a given number using an iterative and recursive approach.
- 7. Write a python function to list out fibonacci numbers upto n term
- 8. Write a Python function to check whether a number is perfect or not.

  [Hints: Perfect number, a positive integer that is equal to the sum of its proper divisors. The smallest perfect number is 6, which is the sum of 1, 2, and 3. Other perfect numbers are 28, 496, and 8,128.]
- 9. Write a Python function to check whether a given string is palindrome or not. [**Hints:** A palindrome is a word, number, phrase, or other sequence of characters which reads the same backward as forward, such as madam or racecar.]
- 10. Write a Python function to check whether a given string or phrase pangram or not. [Hints: A pangram is a sentence or expression that uses all the letters of the alphabet. Example: The best known pangram in English is "The quick brown fox jumps over the lazy dog"]
- 11. Write a Python function to print n rows of the pascal triangle.