SHRIRAM GLOBAL SCHOOL, WHITEFIELD, BLR-67

<u>COMPUTER SCIENCE PRACTICAL PROGRAMS – PYTHON</u>

SL.NO	PROGRAM
1	Menu-driven program to perform all the arithmetic operations in python based on users' choice by creating separate user defined functions. Inputs can be accepted from the user as two numbers.
2	Menu-driven program to find the area of different shapes such as Rectangle, Circle and Triangle based on users' choice by creating separate user defined functions.
3	Menu-driven program to input a number n, then perform the following operations based on users' choice by creating separate user defined functions. a) Print Fibonacci series up to n terms b) Print the factorial of n c) Check whether n is a prime number or not. d) Exit
4	Program to prompt the user to input a string(sentence). Write a menu-driven program to create separate user defined functions to print the statistics related to the inputted string. a) Print total number of characters (including spaces and punctuations) b) Print total number of words c) Check whether any alphabet is present, and if present then print the total number of upper-case and lower-case letters. Otherwise print appropriate message. d) Total number of digits. e) Exit
5	Program to create a numeric list and pass it as an argument to function and perform the following operations on the list based on users' choice. a) double the odd values and make half of the even values in the list and display it after changing. b) display the mode value of the list c) search for an element in the list and print its location, if found. Otherwise print appropriate message. d) Exit
6	Program to input s string (sentence), then write a menu-driven program to create separate dictionaries for the following operations related to the string. a) to print the dictionary contains frequency of each letter in the string.

	b) to print the dictionary contains frequency of each digit in the string c) to print the dictionary contains frequency of each special symbol in the string. d) Exit
7	Program to create a package/module of arithmetic operations (+, -, *, /)
8	Menu-driven programs to create the following user-defined functions: a) Generate_Random (): To pass two numbers and generate any 5 random numbers from that range and insert it into a list, then print the list. b) Random_Even_Sum (): To generate any random number between 1 – 50. If the random number is even, then insert it to a separate list and print the sum of all numbers in that list.