## L. D. College of Engineering. Ahmedabad COMPUTER ENGINEERING

Subject Code: 2180711

**Subject Name: PYTHON PROGRAMMING** 

**Type of course:** Department Elective III

Faculty Name: Prof. Tushar A Champaneria

## **Programming Assignment - 1**

- Write a python program to know the current working directory and to print all contents of the current directory. What changes we need to make in the program if we wish to display the contents of only 'mysub' directory available in current directory?
- Write a python program to append data to an existing file 'python.py'. Read data to be appended from the user. Then display the contents of entire file.
- Write a python program to retrieve strings starting with m and having 5 characters.
- 4 Write a python program to retrieve name and date of birth (mm-ddyyyy) of students from a given file student.txt.
- 5 Write a python program to create a TCP/IP client-server chat application.
- Write a Python program that counts the number of occurrences of the character in the given string. Provide two implementations: recursive and iterative.
- Write a python program to search a specific value from a given list of values using binary search method.
- Write a python program to arrange the characters of a given string 'welcome' in an alphabetical order using insertion sort algorithm.
- 9 Write a python program in which Maruti and Santro sub classes implement the abstract methods of the super class Car.
- 10 Create a class student with following member attributes: roll no, name, age and total marks. Create suitable methods for reading and printing member variables. Write a python program to overload '==' operator to print the details of students having same marks
- 11 Create following regular polygons (regular means all sides the same lengths, all angles the same) using for loop in turtle
  - a. An equilateral triangle
  - b. A square
  - c. A hexagon
  - d. An octagon
- 12 Write a Python GUI program to create three push buttons using Tkinter. The background color of frame should be different when different buttons are clicked.
- Write a Python program to print Fibonacci series upto n terms.
- Write a Python program to check whether the given no is Armstrong or not using user defined function.
- Write a Python program to implement the concept of inheritance.

- 16 Create a class Employee with data members: name, department and salary. Create suitable methods for reading and printing employee information.
- 17 Write a Python program to overload + operator.
- R&&d Create a text file in Python and print no. of lines and no. of unique words.
  - Write Python program to display a label on clicking a push button.