**PRACTICAL FILE- COMPUTER SCIENCE (083)**

**List of Programs**

1. Write a program in python to check a number whether it is prime or not.
2. Write a program to check a number whether it is palindrome or not.
3. Write a program to take a number as input and calculate its cube if its an even number otherwise multiply it by 2.

Write a program to generate random numbers between 1 to 5.

1. Write a program to input a character and to print whether a given character is an alphabet, digit or any other character.
2. Write a python function sin(x,n) to calculate the value of sin(x) using its taylor series expansion up to n terms.

sin(x) = x - x3/3! + x5/5! - x7/7! +….

1. Write a program to calculate the factorial of an integer using recursion.
2. Write a program to print fibonacci series using recursion.
3. Write a program for binary search.
4. Write a recursive pyhton program to test if a string is palindrome or not.
5. Write a program to count the number of vowels present in a text file.

11 Write a program to write those lines which have the character 'p' from one text file to another

text file.

1. Write a program to count number of words in a text file.

13 Write a program to plot a bar chart in python to display the result of a school for five consecutive

years.

1. Write a program in python to plot a graph for the function y = x^2
2. Write a program in python to plot a pie chart on consumption of water in daily life.
3. Write a program for linear search.
4. Write a program for bubble sort.
5. Write a menu based program to perform the operation on stack in python.
6. Write a menu based program to perform the operation on queue in python.
7. Write a menu based program for circular queue.
8. Write a program to open a webpage using urllib library.
9. Write a program to calculate EMI for a loan using numpy.
10. Write a program to find the most common words in a file.
11. Write a program to perform read and write operation with .csv file.
12. Write a Django based web application and write the data to a csv file.(Q1 of Type C on page no 509)

**SQL Queries :**

27 Queries asked in Q No 12,13,14,15,16,17,18 on page no 475(Sumita Arora)

1. Q10 ON PAGE NO 474 (Sumita Arora)

29 Write a program to connect Python with MySQL using database connectivity and perform the

following operations on data in database: Add, View , Update and delete the data