**List of Practicals:**

|  |  |  |
| --- | --- | --- |
| **S.NO** | **Problem Statement** | **Mapping to CO#** |
|  | | |
|  | Write a program to enter two integers, two floating numbers and then perform all arithmetic operations on them. | CO1 |
|  | Write a program to check whether a number is an Armstrong number or not. | CO1 |
|  | Write a python program to that accepts length of three sides of a triangle as inputs. The program should indicate whether or not the triangle is a right angled triangle (use Pythagorean theorem). |  |
|  | Write a python program to find factorial of a number using recursion. | CO2 |
|  | Write a program to print the sum of all the primes between two ranges. | CO1 |
|  | Write a python program to construct the following pattern using nested for loop:  \*  \*\*  \*\*\*  \*\*\*\*  \*\*\*\*\* | CO2 |
|  | Write a program to swap two strings. | CO1 |
|  | Write a Program to Count the Occurrences of Each Word in a Given String Sentence. | CO2,CO3 |
|  | Write a program to create, concatenate and print a string and accessing substring from a given string. | CO2 |
|  | Write a menu driven program to accept two strings from the user and perform the various functions using user defined functions. | CO1,CO2 |
|  | Write a program to find smallest and largest number in a list. | CO2,CO3 |
|  | Write a Program to Remove the ith Occurrence of the Given Word in a List. | C02,CO3 |
|  | Create a dictionary whose keys are month names and whose values are the number of days in the corresponding months.  •Ask the user to enter a month name and use the dictionary to tell them how many  days are in the month.  •Print out all keys in the alphabetically order  • Print out all the months with 31 days  • Print out the key value pairs sorted by number of days in each month | CO2,CO3 |
|  | Make a list of first 10 letters of the alphabet, then use the slicing to do the following operations:  • Print the first 3 letters of the list  • Print any 3 letters from the middle  • Print the letter from any particular index to the end of the list | CO2,CO3 |
|  | Write a program that scans an email address and forms a tuple of user name and domain. | CO2,CO3 |
|  | Write a program that uses a user defined function that accepts name and gender (as M for Male, F for Female) and prefixes Mr./Ms. on the basis of the gender. | CO2,CO3 |
|  | Write a Program to Sort a List of Tuples in Increasing Order by the Last Element in Each Tuple. | CO2,CO3 |
|  | Write a Program to Swap the First and Last Element in a List. | CO2,CO3 |
|  | Write a program to display Bar graphs or Pie chart using Matplotlib. | CO2,CO3 |
|  | Write a program that defines a function large in a module which will be used to find larger of two values and called from code in another module. | CO2,CO3 |
|  | Write a python program to define a module to find Fibonacci Numbers and import the module to another program. | CO2,CO3 |
|  | Write a program to know the cursor position and print the text according to specifications given below:  ● Print the initial position  ● Move the cursor to 4th position  ● Display next 5 characters  ● Move the cursor to the next 10 characters  ● Print the current cursor position  ● Print next 10 characters from the current cursor position | CO2,CO3 |
|  | Create a binary file with roll number, name and marks. Input a roll number and perform the following operations:  • update the marks.  • Delete the record  • Display the record  • Append the record  • Search the record | CO4 |
|  | Write a program to Create a CSV file by entering user-id and password, read and search the password for given user id. | CO5 |
|  | Write a Program to Count the Number of Words in a Text File. | CO5 |
|  | Write a Program to Count the Number of Lines in Text File. | CO5 |
|  | Write a program that inputs a text file. The program should print all of the unique words in the file in alphabetical order. | CO4 |
|  | Write a Python class to implement pow(x, n). | CO4 |
|  | Write a program to create a numpy array. | CO5 |
|  | Write a program to Extract first n columns of a Numpy matrix. | CO5 |
|  | Write a program to sum all elements in a NumPy array. | CO5 |
|  | Write a program to add a list to a NumPy array . | CO4,CO5 |
|  | Write a program of Numpy convert 1-D array with 8 elements into a 2-D array in Python | CO4,CO5 |