Lab Component:

SL. No.	QUESTIONS
1.	a) Write a python program to read 2 numbers from the keyboard and perform the basic arithmetic operations based on the choice. (1-Add, 2-Subtract, 3-Multiply, 4-Divide) b) Write a python program to find the factorial of number using while loop. c) Write a python program to add 10 numbers by inputting each from the keyboard using for loop.
2.	a) Write a python function linearSearch() to read an array and search for the key element. Display the appropriate messages. Use the recursive function. b) Write a python program to define a function max_of_three() that takes three numbers as arguments and returns the largest of them using default arguments. c) Write a python program to define a function generate_n_chars() that takes an integer n and a character c and returns a string, n characters long. For example, generate_n_chars(5,"x") should return the string "xxxxx" using keyword only parameters.

3.	a) Write a python program to create a list and perform the following operations
	    • Inserting an element
	    • Removing an element
	    • Appending an element
	    • Displaying the length of the list
	    • Popping an element
	    • Clearing the list

4.	a) Write a tiny Python program numDict.py that makes a dictionary whose keys are the words 'one', 'two', 'three', and 'four', and whose corresponding values are the numerical equivalents, 1, 2, 3, and 4 (ints, not strings). b) Write a Python program to store PROFILE_DATA(user_id, name, DOB, qualification, work_experience) in a dictionary and pretty print the dictionary contents. (import pprint)
5.	a) Write a Python program to demonstrate built-in modules (Random,Time, Math, etc,) b) Create a user defined module using python to execute the following a) area of circle b) area of triangle c) area of rectangle.
6.	a) Develop a python program to sort the contents of a text file and write the sorted contents into a separate text file. [Hint: Use string methods strip(), len(), list methods sort(), append(), and file methods open(), readlines(), and write()].

7.	a) Develop a python program that uses class Student which prompts the user to enter marks in three subjects and calculates total marks, percentage and displays the score card details. [Hint: Use list to store the marks in three subjects and total marks. Use __init__() method to initialize name, USN and the lists to store marks and total, Use getMarks() method to read marks into the list, and display() method to display the score card details.]
8.	a) Create a class called time. Its three members all type int should be called hours, minutes and seconds. Write a python program that prompts the user to enter a time values separately. The Program should then store the time in the object and finally printout the total no of seconds represented by this value. Use appropriate member functions.