

LAB 1

1. Program to create, initialize, assign and access a pointer variable.
2. Program to swap two numbers using pointers.
3. Program to change the value of constant integer using pointers.
4. Program to print a string using pointer.
5. Program to count vowels and consonants in a string using pointer.
6. Program to read array elements and print with addresses.
7. Program to read and print student details using structure pointer, demonstrate example of structure with pointer.

LAB 2

1. Write a program in C to sort an array using Pointer.
2. Write a program in C to print a string in reverse using a pointer.
3. Write a program in C to compute the sum of all elements in an array using pointers.

LAB 3

1. write a program in c/c++ to use static, local, global variable in different functions and call that functions twice, then analyse the results and print final value of each variable.
2. write a program in c/c++ to define global variable which is accessed by main() and two other functions and then print the values of global variable in each function call.
3. Write a program in C/c++ to compute the sum of all elements in a Z-matrix.
4. Write a program in c/c++ to calculate the factorial of n using recursion.

LAB 4

- 1-WAP in C/C++ to delete all vowels from the string using call by value.
- 2- WAP in C/C++ to increment the alphabets of a string by one alphabet using call by reference.
- 3-WAP in C/C++ to check string 1 is a substring of string 2 or not

LAB 5

1. write a program in c/c++ to calculate volume of cube,sphere and cone using function overloading.
2. write a program in c/c++ to compute the area of circle,Use a default value of pi is 3.141 in case pi is omitted in the function call.
3. write a program in c/c++ to sort the alphabets of given string using call by reference.
4. Write a program in c/c++ to calculate HCF(M,N) where $M > N$ using "Euclid's division method" using recursion.

LAB 6

1. write a program in c/c++ to insert 10 elements in a linked list.
2. write a program in c/c++ to add a node to $((n/2)+2)$ th position in an existing linked list.
3. write a program in c/c++ to remove a node 3rd to the last from an existing linked list.
4. write a program in c/c++ to detect duplicate node(s) if exists in a linked list.
5. write a program in c/c++ to sort the linked list after implementation of question 2.

LAB 7

1. write a program in c++ to print the total surface area and volume of a cylinder by creating a class named "cylinder" with a function to print the area and volume.
2. write a program in c++ to print the volume of cones and cuboid by creating a class named "volume" Heights, radius and sides are passed as parameter to its constructor.
3. Write a program in c++ by creating an 'Employee' class having the following functions and print the final salary.
 - 1 - 'AddInfo()' which takes the salary, number of hours of work per day of employee as parameters
 - 2 - 'AddSal()' which adds \$10 to the salary of the employee if it is less than \$500.
 - 3 - 'AddWork()' which adds \$5 to the salary of the employee if the number of hours of work per day is more than 6 hours.
4. Write a program in c++ to print the roll number and average marks of 5 students in three subjects (each out of 100). The marks are entered by the user and the roll numbers are automatically assigned.

LAB 8

- a. write a program in c++ to create two classes named A and B. create another class named C which inherits both class A and B.
Now, create a function in each of these classes which prints " A-class", "B-class" and "both-class: A and B" respectively.
now create an object for each class. call the function of each of its parent by the object of class C.
- b. write a program in c++ to read and display information about employees and managers. Emp is a class that contains emp_no, name, address and department.
manager class contains all information of the Emp class and a list of employees working under a manager.
- c. write a program in c++ to print the factorial of a number given by user by creating a class factorial. if no number is passed by the user while creating an object of factorial class, then the number should be 0.
using constructor.

