**Lab-2 Class & Objects**

1. WAP that reads two numbers. Calculate the smallest one and then print the smallest one defining functions outside the class.

2.WAP declaring a class and object to input assessment marks and practical marks defining functions setmark() and publishmark(). Define the function inside the class.

3. WAP input name, address, faculty and roll no of a student and display it. Use both member functions defining inside the class and outside the class.

4. Create a class called student with three data members (student name[20], roll\_no, Address) function called input-data() to take details of the students from the user, and a function called display\_data( )to display the details of the students. In main, create two objects of the class student and for each call both of the functions.

5. Create a new class named city that will have two member variables Cityname(char[20]},and DistFromKTM(float). Add member functions to set and retrieve the CityName and DistFrom KTM separately. Add new member functions AddDistance that takes two arguments of class City and returns the sum of DistFrom KTM of two arguments. In main function,initialize three city objects. Set the first and second city to be Pokhara and Dhangadi. Display the sum of DistFromKTM of Pokhara and Dhangadi calling AddDistance function of third city object. **(use objects as function Arguments).**

6. Write a program to read two integer numbers and display it. Use constructor to read the data.

7. Write a program to make one object to read one integer data. Make another object and copy the data of first object to it. (Use the concept of copy constructor).

8. Write a program to add two complex numbers using the concept of constructor overloading.

9. Write a program to show the concept of a destructor.

10. Write a program to add two integer numbers and from two different objects and place it in third object and display the result. Use the concept of “returning objects from function”.

11. Write a program showing the concept of Static data member.

12. Write a program to read name, age and salary of an employee using C++ structure.

#include <iostream>

using namespace std;

struct Person

{

char name[50];

int age;

float salary;

}; // *p1;*

int main()

{

Person p1; // *This is error in C. C declaration is struct Person p1;*

cout << "Enter Full name: ";

cin.get(p1.name, 50);

cout << "Enter age: ";

cin >> p1.age;

cout << "Enter salary: ";

cin >> p1.salary;

cout << "\nDisplaying Information." << endl;

cout << "Name: " << p1.name << endl;

cout <<"Age: " << p1.age << endl;

cout << "Salary: " << p1.salary;

return 0;

}