## **Practical-9**

# Q. Program to create a person class having names as data member in it and define two inherited classes Student and Employee.

#### Code:-

```
//Harsh Bamotra
//program to create a person class
#include <iostream>
#include <string> using
namespace std;
//defining base class person
class person
  {
        protected:
        string name;
                                                                         //defining protected members
        public:
        void setData(string x)
                                                                     //function to initialize protected members
                        name=x;
                }
       void display()
                                                                //function to display name
                {
                        cout << "Name::" << name;
                }
  };
//defining inherited class student
student: public person
  {
        private:
        string course;
                                                           //defining private members
        int marks, year;
        public:
        void setData1(string x , int y , int z)
                                                         //defining function to initialize private members
                {
                        course=x;
                        marks=y;
                        year=z;
                }
```

```
void display1()
                                                      //defining function to display the data
                {
                        cout << "Name::" << name << endl;
                        cout << "Marks::" << marks << endl;
                        cout << "Course::" << course << endl;</pre>
                        cout << "Year::" << year << endl;</pre>
                }
  };
//defining inherited class employee
class employee : public person
        {
                private:
                                                             //defining private members
                string department;
                int salary;
                public:
                void setData2(string x , int y)
                                                                 //defining function to initialize the private members
                        {
                                 department=x;
                                 salary=y;
                        }
                void display2()
                                                                 //defining function to display data
                        {
                                 cout << "Name::" << name << endl;
                                 cout << "Department::" << department << endl;</pre>
                                 cout << "Salary::" << salary << endl;
                        }
        };
int main()
  {
        student ob1;
                                           //defining object 1
        employee ob2;
                                          //defining object 2
        ob1.setData("Harsh");
                                                                  //initializing data members of ob1
        ob1.setData1("Bsc Hons CS", 100, 1);
        ob2.setData("Harsh");
                                                               //initializing data members of ob2
        ob2.setData2("Computer Science", 70000);
        cout << "***** Details of the student ******" << endl;</pre>
        ob1.display1();
                                                                          //displaying the data of ob1
        cout << "***** Details of the employee ***** << endl;
        ob2.display2();
                                                                        //displaying the data of ob1
        return 0;
  }
```

### **Output:-**

```
C:\Users\harsh\Desktop>g++ Practical-9.cpp -o Practical-9.exe

C:\Users\harsh\Desktop>Practical-9.exe

****** Details of the student ******
Name::Harsh
Marks::100
Course::Bsc Hons CS
Year::1

****** Details of the employee *****
Name::Harsh
Department::Computer Science
Salary::70000

C:\Users\harsh\Desktop>
```

#### **Harsh Bamotra**

**AC-1216**