Practical-4.(f)

Aim: Write a C++ program that illustrate multiple inheritance.

Algorithm:(i)Start

(ii)Class A

(iii)Class B

(iv)Class C: public A, public B

(v)Stop

Theory: Multiple Inheritance is a feature of C++ where a class can inherit from more than one classes. The constructors of inherited classes are called in the same order in which they are inherited. For example, in the following program, B's constructor is called before A's constructor.

Input:

```
#include <iostream>
class student_detail
{
   protected:
   int rno,sum,i,marks[5];
   public:
```

```
   void detail()
   {
      std::cout<<"Enter the Roll No: "<<std::endl;
      std::cin>>rno;
      std::cout<<"Enter the marks of five
subjects"<<std::endl;
      for(i=0;i<5;i++)
      {
         std::cin>>marks[i];
      }
      sum=0;
      for(i=0;i<5;i++)
      {
         sum=sum+marks[i];
      }
   }
};
class sports_mark
{
```

```
    protected:
    int s_mark;
    public:
    void get_mark()
    {
        std::cout<<"\nEnter the sports mark: ";
        std::cin>>s_mark;
    }
};
class result:public student_detail,public sports_mark
{
    int tot;
    float avg;
    public:
    void disp()
    {
        tot=sum+s_mark;
        avg=tot/6;
```

```
        std::cout<<"\n\n\tRoll No: "<<rno<<"\n\tTotal: "<<tot<<std::endl;
        std::cout<<"\n\tAverage Marks: "<<avg;
    }
};
int main(){
    std::cout<<"08_Rabin Nadar"<<std::endl;
    result obj;
    obj.detail();
    obj.get_mark();
    obj.disp();
    return 0;
}
```

Output:

Output Clear

```
/tmp/4Ev3vJ2ICA.o
08_Rabin Nadar
Enter the Roll No:
8
Enter the marks of five subjects
45
55
75
89
90
Enter the sports mark: 70
Roll No: 8
    Total: 424

    Average Marks: 70
```