**Lab Assignment No: 12**

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**SUBJECT CODE**: IT8002

**SUBJECT NAME**: CPP AND JAVA

**GR NO:** 119C0046

**BATCH:** B3

* **PROBLEM STATEMENT:1**:- Virtual base class concept Write a c++ program for display the result of the student as a class student accept roll no of the student, class test accept marks of the two subjects, in class sports accept student’s sports marks. All the information of the above classes display in the result class. Use virtual base class concept.

**CODE:**

#include<iostream>

using namespace std;

class Student

{

protected:

int roll;

};

class Test:virtual public Student

{

protected:

int marks1,marks2;

Test(int m1,int m2): marks1(m1),marks2(m2) {}

void show()

{

cout<<"The marks are "<<marks1<<" & "<<marks2<<endl;

}

};

class Sports:virtual public Student

{

protected:

int score;

Sports(int s):score(s) {}

void show()

{

cout<<"Score = "<<score<<endl;

}

};

class Result:public Test,Sports

{

public:

Result(int r,int m1,int m2,int s) : Test(m1,m2),Sports(s)

{

roll = r;

}

void show()

{

cout<<"Roll : "<<roll<<endl;

Test::show();

Sports::show();

cout<<"Total Marks : "<<marks1+marks2+score<<endl;

}

};

int main()

{

Result \*r = new Result(59,91,89,80);

r->show();

return 0;

}

**OUTPUT:**

