1. Write a C++ program to implement **multiple inheritance** to print the following information

**Class name :**BasicInfo

**Attributes :**

string name

int empno,

string gender

**Member function :**

**GetPersonalInfo()**

**Class name :** DepartInfo

**Attributes:**

string deptname;

int deptno;

int deptstrength;

**Member function :**

**GetDepartInfo()**

**Class Name :** Employee

**Member function :**

PrintEmpInfo()

{

Print all attributes in BasicInfo and DepatInfo

}

Create an object emp for Employee class and call the function PrintEmpInfo() in Main class

Input :

Enter employee's basic info:

Enter Name: Ram

Enter Employee Id: 10

Enter Gender: Male

Enter employee's department info:

Enter Department Name: CSE

Enter Department No: 12

Enter department strength 69

output :

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Employee's Information is:

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Basic Information...:

Name: Ram

Employee ID: 10

Gender: Male

Department Information...:

Department Name: CSE

Department No: 12

Department strength: 69

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# 2. C++ program to demonstrate example of **hierarchical inheritance** to get square and cube of a number

**Class name :**Number

**Attributes :**

int num

**member function:**

**GetNumber()**

**Class name :**Square

**member function:**

**MakeSquare()**

**Class name :**Cube

**member function:**

**MakeCube()**

Create objects for Square and Cube and call the functions MakeSquare() and MakeCube in main

input and output

Enter an integer number: 3

The square of the number is 9

Enter an integer number: 5

The cube of the number is 125

3. Write a C++ program to calculate the percentage of a student using multi-level inheritance. Accept the marks of three subjects **sub1,sub2,sub3 (**through function **accept\_marks()**) in base class called **Addclass.** The class Addclass will be derived by the subclass called **Total** (in which print the sum of all the 3 subjects using function **total()**). The class **Total** will be inherited by the class called **Percentage (**in which **show\_result()** function is defined to perform calculation of percentage and print the percentage)**.** Create the object for the Percentage and Call total() and show\_result().

Input and output

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Enter Marks for Three Subjects

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subject 1 : 90

subject 2 :80

subject 3 : 90

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Total Mark : 260

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Percentage Mark : 86.6667