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## **Diamond-shaped inheritance**

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Write a program contains a class Student that has data members: name (string), age(float), ID( INT), function Read() to read data members, and function Write() to display data members. Student class is the base class for two derived classes: Math, CS. Math class contains data members: MC[3] (string), D[3](double), sum( double), function Read() to read data members and set the value of sum Which is the summation of D's elements, and function Write() to display data members. CS class contains data members: CSC[5] (string), D[5](double), sum( double), function Read() to read data members and set the value of sum Which is the summation of D's elements, and function Write() to display data members. From these two classes (Math, CS) drive the class Result which contains data members: Total (double), GPA(char), function Read() to set the values of data members such that total is the total sum for all degree (Math's degree, CS's degree), and GPA taken its value according to the following:

GPA	Average of degree %
A	≥90
B+	85:<90
В	80:<85
C+	75:<80
C	65:<70
D	60:<65
$\mathbf{F}$	<60

It contains a function Write() to display data members. In main function, define an array of Result class with length n, read and write the elements of this array in suitable form for each object.