Practical 30 June

1) You are given an interface AdvancedArithmetic which contains a method signature int divisor sum(int n)

You need to write a class called MyCalculator which implements the interface. divisorSum function just takes an integer as input and returns the sum of all its divisors. For example divisors of 6 are 1, 2, 3 and 6, so divisor_sum should return 12. The value of n will be

Implement both the class and the interface.

at most 1000.

2) We have to calculate the percentage of marks obtained in three subjects (each out of 100) by student A and in four subjects (each out of 100) by student B. Create an abstract class 'Marks' with an abstract method 'getPercentage'. It is inherited by two other classes 'A' and 'B' each having a method with the same name which returns the percentage of the students. The constructor of student A takes the marks in three subjects as its parameters and the marks in four subjects as its parameters for student B. Create an object for each of the two classes and print the percentage of marks for both the students.