Day 19: Interfaces!

Welcome to Day 19! Check out a video review of interfaces here, or just jump right into the problem.

Interfaces are an important concept in Java and in a few other languages like C#.

Here you are given an interface *AdvancedArithmetic* which contains a method signature *int divisorSum(int n)*. (The *divisorSum* function just takes an integer as input and return the sum of all its divisors.) Your only task is to write a class *Calculator* which implements the interface.

Note : The class *Calculator* shouldn't be public.

Good luck!

Input Format

Only one line containing integer *n*

Constraints
$1 \le n \le 1000$

Output Format

In the first line print *"I implemented: AdvancedArithmetic"* without quotes. In the next line print the sum of divisors of *n* as given in problem statement.

Sample Input

```
6
```

Sample Output

```
I implemented: AdvancedArithmetic
12
```

Explanation

Divisors of 6 are 1,2,3 and 6. 1+2+3+6=12.