Objective
Today, we're learning about Interfaces. Check out the Tutorial tab for learning materials and an instructional video!

Task
The `AdvancedArithmetic` interface and the method declaration for the abstract `divisorSum(n)` method are provided for you in the editor below.

Complete the implementation of `Calculator` class, which implements the `AdvancedArithmetic` interface. The implementation for the `divisorSum(n)` method must return the sum of all divisors of n.

Input Format

A single line containing an integer, n.

Constraints

- $1 \leq n \leq 1000$

Output Format

You are not responsible for printing anything to stdout. The locked template code in the editor below will call your code and print the necessary output.

Sample Input

```
6
```

Sample Output

```
I implemented: AdvancedArithmetic
12
```

Explanation

The integer 6 is evenly divisible by 1, 2, 3, and 6. Our *divisorSum* method should return the sum of these numbers, which is $1 + 2 + 3 + 6 = 12$. The Solution class then prints `I implemented: AdvancedArithmetic` on the first line, followed by the sum returned by *divisorSum* (which is 12) on the second line.