

## Evaluating Arithmetic Expression

**Input: Arithmetic Expression**

**Output: Result of the arithmetic expression keeping operator precedence in mind**

**Input Format:**

Multiple Arithmetic Expressions, each in a new line.

**Structure of Arithmetic Expression:**

Integer BinOp Integer BinOp Integer . . . BinOp Integer BinOp is +, -, \*, /  
Integer is a string of digits, where digits are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

**Output Format:**

Evaluated result (each in a new line) for each arithmetic expression

**Example of input:**

```
2 / 0
36*98
44-46*14*6-10
87*26
32-52
38
34-34*54-50
87+55
41-13/40/16
30/25-21
```

**Example of Output:**

```
Division by zero
3528
-3830
2262
-20
38
-1852
142
41
-20
```

## NOTE:

- 1) Print out "Division by zero" if the expression divides by 0
- 2) There is no need to handle overflow
- 3) Assume that the input is wellformed

## Helpful Function:

```
// reads one line from input stream into buffer (std::string type)  
// returns 0 if std::cin encounters EOF character => input has ended.  
// https://en.cppreference.com/w/cpp/string/basic_string/getline  
std::getline(std::cin, buffer);
```

```
/// Takes integer in string representation and outputs the corresponding string  
// inputString is std::string type  
// can throw std::invalid_argument if input is not a valid integer string  
// https://en.cppreference.com/w/cpp/string/basic_string/stol  
std::stoi(inputString);
```