Integer Calculator



The program below performs basic arithmetic operations on two integer values. Modify the program so that it performs error checking (exception handling) in the following areas:

When the user enters the two integer operands used in the operation. If the user enters a value that is not an integer (Ex. 2a, 4., \$3) the program should display an error message and ask the user to try again. If the user attempts to divide by zero the program should display an error message.

IntegerCalculator.java – basic description of a simple four function calculator that only works with integers

getInfo()

This method should display a menu which asks the user to select the arithmetic operation he wishes to perform. Once the operation has been selected the user should be prompted to enter the two operands used in the operation. If the user enters a value that is not a valid integer the Scanner class's nextInt method will throw an exception. Do a little experimenting/research to determine the correct exception to throw. Your method should catch this exception, display an error message, and then allow the user to enter the value again. The method should return an integer representing the operation selected from the menu.

You will need to use a **try/catch block** in your implementation.

divide()

If the user attempts to divide by zero the JVM will throw an ArithmeticException. Your method should catch this exception and display an error message.

You will need to use a **try/catch block** in your implementation.

Sample Run

```
1)Add 2)Subtract 3)Multiply 4)Divide 5)Quit -->1

Operator 1 -->10

Operator 2 -->15

10 + 15 = 25

1)Add 2)Subtract 3)Multiply 4)Divide 5)Quit -->XD

Not a valid number, try again.

1)Add 2)Subtract 3)Multiply 4)Divide 5)Quit -->2

Operator 1 -->a3

Not a valid number, try again.
```

```
1) Add 2) Subtract 3) Multiply 4) Divide 5) Quit -->2
Operator 1 -->100
Operator 2 -->2.
Not a valid number, try again.
1)Add 2)Subtract 3)Multiply 4)Divide 5)Quit -->2
Operator 1 -->100
Operator 2 -->70
100 - 70 = 30
1) Add 2) Subtract 3) Multiply 4) Divide 5) Quit -->4
Operator 1 -->7
Operator 2 -->0
Error: You cannot divide by zero!
1) Add 2) Subtract 3) Multiply 4) Divide 5) Quit -->4
Operator 1 -->10
Operator 2 -->2
10 / 2 = 5
1)Add 2)Subtract 3)Multiply 4)Divide 5)Quit -->5
```