

Exceptional Division

Purpose

To become familiar with catching exceptions.

Directions:

Your task is to write a program that divides two *integers*. The program should:

Prompt the user for the numerator and read it in. The value must be an integer. If it is not, catch the associated exception and display the message “Error: you must enter a whole number” to the user and re-prompt the user for a numerator.

Do the same thing for the denominator.

Display the message <numerator> / <denominator> = <answer> to the user. If the user attempts to divide by zero, display the message “Error: the denominator can’t be zero”, re-prompt the user for a new denominator, and try again to display the answer message.

HINT: If reading in a number from the user results in an exception, you will likely need to read in the new line (i.e. “enter”) character following the number prior to reading in any more numbers.

Example output:

```
What is the numerator? bob
Error: you must enter a whole number
What is the numerator? 2
What is the denominator? fred
Error: you must enter a whole number
What is the denominator? 0
Error: the denominator can't be zero
What is the denominator? 5
2 / 5 = 0
```