More With Exceptions

File **CountLetters.java** is a program that reads a series of letters from the user and prints the number of occurrences of each letter. Study the program and then save it to your computer. Compile and run the program.

Note that the series of letters is first converted to all upper case, then each letter is translated to an index in the range **0** ... **25** by subtracting '**A**' (character code 65) from the upper case letter. **Notice that no test is done to ensure that the characters are actually letters.**

Run **CountLetters** and enter a series of letters to see that the program works correctly. Now enter some characters that are both alphabetic and non-alphabetic. The program will throw an **ArrayIndexOutOfBoundsException**, because a non-letter will generate an index that is not between **0** and **25**. For example, a '[' character (code 91) will generate an index value of **26**, which is an invalid index for the counts array.

Correct this problem by adding t**ry** and **catch** blocks to the **for** loop that increments the counts array. The catch block should add **1** to a new int variable named **otherCharacters**. Then add a statement to the main loop to display the value of **otherCharacters** after the counts of alphabetic characters are displayed. Compile and run the program. Make sure that the program no longer ends with an exception when invalid data is entered and that **all** characters (alphabetic and non-alphabetic) are counted.