

Project 6 - 20 points

Write a Java program to gather information about strings. Write your own user-defined methods to calculate vowel, digit, and white space counts using some Character class methods. The Character class methods DO NOT count characters for you, that is what you must do.

There will be a loop in your main() method to read strings from the user until end of file (EOF) has occurred.

With each String read from the user, perform the following:

- 1) Report how many characters are in the string (**length()** String class method).
- 2) Report how many vowels are in the string (no Java method exists to help with this).
- 3) Report how many digits are in the string (**isDigit()** Character class method).
- 4) Report how many letters are in the string (**isLetter()** Character class method).
- 5) Report how many white-space characters are in the string (**isWhitespace()** Character class method).

Your output should resemble (assuming a Unix system):

```
Enter a string for character classification: (EOF to end):  
The quick brown fox jumps over the lazy dog.
```

```
inputLine = "The quick brown fox jumps over the lazy dog."
```

```
inputLine is 44 characters long and contains the following:  
8 whitespace characters.  
0 digits.  
35 letters.  
11 vowels.
```

```
Enter a string for character classification: (EOF to end):  
1-0-0-1-0-0-1 SOS!
```

```
inputLine = "1-0-0-1-0-0-1 SOS!"
```

```
inputLine is 18 characters long and contains the following:  
1 whitespace characters.  
7 digits.  
3 letters.  
1 vowels.
```

```
Enter a string for character classification: (EOF to end):  
<CTRL-D>
```

Comment all sections. No comments mean lost points!

This project should be called p6.java and submitted using:

```
$ submit jojo p6.java
```