

String Methods Problem

Create a package named `string_methods` for this program.

The Starting Template for this program is shown below. Fill in code where you see highlighted comments with instructions in the methods `readString()`, `countOccurrences()` ... etc. Write code in these highlighted sections that do what the comments request.

Don't modify `main()` or the `printCounts()` routine.

When you run your program, you will need to enter in a string for the "readString" method. Use the string:

Aardvarks get big and bigger as You feed them big and bigger ants who Feed on apples.

```
package string_methods;

// Starting Template
import java.util.Scanner;

public class MyStringMethods {

    private String myStr="";

    public void readString()
    {
        // Prompt the user and read in a String from a Scanner class from the
        keyboard
        // with the nextLine() method and store it in "myStr"
    }
    public void setString(String s)
    {
        myStr =s;
    }
    public int countOccurrences(String s)
    {
        // use indexOf and return the number of occurrences of the string "s"
        in "myStr"
    }
    public int countOccurrences(char c)
    {
        // use indexOf and return the number of occurrences of the character
        "c" in "myStr"
    }
    int countUpperCaseLetters()
    {
        // return the number of upper case letters in "myStr"
    }

    int countLowerCaseLetters()
    {
```

```

        // return the number of lower case letters in "myStr"
    }
    public void printCounts(String s, char c)
    {
        System.out.println("*****");
        System.out.println("Analyzing: myStr="+myStr);
        System.out.println("Number of Upper case letters="+
countUpperCaseLetters());
        System.out.println("Number of Lower case letters="+
countLowerCaseLetters());
        System.out.println("Number of "+s + " is "+ countOccurrences(s));
        System.out.println("Number of "+c + " is "+ countOccurrences(c));
    }

    public static void main(String[] args) {
        MyStringMethods msm = new MyStringMethods();
        msm.readString();
        msm.printCounts("big", 'a');

        msm.setString("Parked in a van down by the river bank .... The van
evan vanished near a lot of other vans");
        msm.printCounts("van", 'a');

        MyStringMethods msm2 = new MyStringMethods();
        msm2.setString("the elephant in the room wouldn't budge");
        msm2.printCounts("the", 'i');
    }
}

```

Some of the Output from your program will look like the following

```

Enter in the desired String:
Aardvarks get big and bigger as You feed them big and bigger ants who Feed on
apples.
*****
Analyzing: myStr=Aardvarks get big and bigger as You feed them big and bigger
ants who Feed on apples.
Number of Upper case letters=3
Number of Lower case letters=65
Number of big is 4
Number of a is 7
*****
Analyzing: myStr=Parked in a van down by the river bank .... The van had was
near a lot of other vans

..... More output follows

```