

## CSC 160 WINTER 16 LAB 4-1 METHODS

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### 1. INTRODUCTION

Start by typing the following shell into your program, suitably modified to reflect your own name:

```
package mugandacsc150lab4_1;

/**
 * @author Godfrey Muganda
 */
public class MugandaCSC150Lab4_1
{
    /**
     *
     * @param str
     * @param ch
     * @return the number of times that ch occurs in str
     */
    static int frequency(String str, char ch)
    {
        return 0;
    }

    public static void main(String[] args)
    {

    }
}
```

### 2. IMPLEMENT THE `frequency` METHOD

- Fill in the code inside the `frequency` method so that it returns the number of times the character `ch` occurs within the string `str`.
- Add code to the main method so that it asks the user to enter a string (on its own line), and then a character (also on its own line), and then calls the `frequency` method to determine the number of times the character occurs in the string.

The program should then print out the number of times the character appears in the string.

Note: to read a single character, use a string variable to read a string and then take the first character of the string.

Here is an example:

```
Enter a string on its own line: all dogs growl bark and eat
Enter a single character on its own line: a
The character a occurs 4 times.
```

### 3. FREQUENCY OF THE FIRST AND LAST CHARACTERS

Add code to print the number of times the *first* and *last* character in the string appears in the string. Now your program should run like this:

```
Enter a string on its own line: this is the good life
Enter a single character on its own line: i
The character i occurs 3 times.
The character t occurs 2 times.
The character e occurs 2 times.
```

### 4. ADD A LOOP

Finally, Modify your program so that it repeats everything 3 times. Make sure you use a loop.