Object Oriented Programming
Assignment 3 - Letter Counter

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1 Hmmmmmm

Your program will:

1. Read a command from the user: start to begin a new cycle, exit to quit

2. Read 10 words/phrases from the user. Assume only letters

3. Tally up the occurences of each letter (*case insensitive, although the user may enter upper or lower case*), and print it back out to the user. Begin a new cycle

Bonus tasks:

- Ask the user how many words he/she wants to enter on each cycle

- Use collections, and ask user for an "end phrase" to stop collecting words

- Add other commands. This other functionality can be anything you want, demonstrating good knowledge of Java syntax

Requirements:

1. Use top-down design and decomposition (breaking down tasks into functions)

Tips:

- try: for (char ch = 'a'; ch <= 'z'; ch = (char) (ch + 1)) Console.println(ch);

- try: Console.println((int) ('a' − 'a'))

- try: Console.println((int) ('b' − 'a'))

- try: Console.println((int) ('z' − 'a'))

- try: Console.println((char) ('a' + 0))

- try: Console.println((char) ('a' + 1))

- try: Console.println((char) ('a' + 25))

- Notice that there are 26 characters which can fit in an array of 26 ints - each int corresponding to the occurences of a character

- For example, you may have int [] occurencesOfEachCharacter = new int[26]. occurencesOfEachCharacter[1] should correspond to the times you've encountered 'b' (because 'b' is the second character, but in computer science we count from 0 so it is the '1'th index)

2 Some references

- http://homeandlearn.co.uk/java/upper_lower_case.html

- http://homeandlearn.co.uk/java/comparing_java_strings.html

- http://homeandlearn.co.uk/java/charAt.html