CSE 1322L - Lab 2

Introduction

In this lab, you will practice using selection statements (IF blocks and SWITCH statements) and repetition statements (WHILE, DO-WHILE, and FOR loops).

Requirements

The features described below must be in your program:

- Your main method must implement the following menu options:
    1. **Count from a number to another**
        - Prompts the user for 2 numbers (start and end), both of which can be either positive or negative
        - If the numbers are the same, print “Start and end are the same!”
        - Otherwise, print the starting number, every number between the starting and the ending number, and the ending number, all in order from start to finish. Each number must be in its own line
        - Once done, print “Done counting”
    2. **Determine largest number**:
        - Prompts the user for numbers until the user enters 0
        - If the number the user enters is larger than the current largest number, remember that number instead
        - The initial “largest” number should be 0
        - Once the user enters 0, print out “The largest number was X”, with X being the largest number the user entered
    3. **Type in word**:
        - Print “Type in the word ‘Computer’: ”
        - If the user types in “Computer”, print “Correct!”
        - Otherwise, keep prompting the user to type until they type in “Computer”
    4. **Quit**: Terminates the program

Deliverables

- Lab2.java (driver)

Considerations

- While you will not lose points for which selection or repetition statements you decide to use throughout your program, choosing the correct one can help transmit your intent to other readers more easily.

Sample Output (user input in red)

```
1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 1

Enter the start point: 5
Enter the end point: 5
Counting from 5 to 5...
Start and end are the same!
Done counting.

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 1

Enter the start point: -5
Enter the end point: 5
Counting from -5 to 5...
-5
-4
-3
-2
-1
0
1
2
3
4
5
Done counting.

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 1

Enter the start point: 5
```

```
Enter the end point: -5
Counting from 5 to -5...
5
4
3
2
1
0
-1
-2
-3
-4
-5
Done counting.

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 3

Type in the word 'Computer': computer
Incorrect. You must type 'Computer': CoMpUtEr
Incorrect. You must type 'Computer': Computer
Correct!

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 3

Type in the word 'Computer': Computer
Correct!

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 2
```

```
This option will display the largest number entered. Enter 0 when
done.
Enter a number (current largest is 0): 73
Enter a number (current largest is 73): 56
Enter a number (current largest is 73): 46
Enter a number (current largest is 73): -4
Enter a number (current largest is 73): 11
Enter a number (current largest is 73): 99
Enter a number (current largest is 99): 86
Enter a number (current largest is 99): 0
The largest number entered was 99

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 2

This option will display the largest number entered. Enter 0 when
done.
Enter a number (current largest is 0): 0
The largest number entered was 0

1. Count from a number to another
2. Determine largest number
3. Type in word
4. Quit
Enter option: 4

Shutting off...
```