

# CSC 171 LAB 04

Your assignment is to write a program in the Java language by following the instructions below. The lab has five sections, and points are divided equally among the sections. You may choose the topic of the questions that you ask the user, but you may not use examples from the book, the lecture, or the instructions below. Create something on your own. Remember that you may lose up to 10% of your grade for style, and gain up to 10% if you do something impressively creative.

Refer to chapter 4 in the Deitel & Deitel text if you need help with conditionals.

**Note: Giving or receiving electronic copies of CSC 171 lab solutions are violations of the academic honesty policy.** More importantly, as each lab builds on the previous labs, and each project builds on the labs, if you do not implement the solutions yourself, you will not learn by doing, and will struggle with later assignments.

Follow the instructions of your TAs regarding appropriate hand-in procedures.

## Lab Instructions

1. Write a program with a **main** method that prompts the user for input using questions that you write about a specific subject. You must ask at least one question that requires an answer in the form of a string, and at least one question that requires an answer in the form of a number.
2. In your program, write a simple conditional statement to test the numeric value entered by the user. You may use any condition that you'd like, e.g. greater than, less than, not equal to, etc. If the conditional evaluates to true, print a message.
3. In your program, write a simple conditional statement that tests for equality between the string entered by the user and some other string. Remember that, if **str1** is a String, then the expression **str1.equals( "Foobar" )** will return **true** if **str1** has the value "Foobar" and **false** otherwise. If the conditional evaluates to true, print a message.
4. In your program, write an if-else statement that tests whatever you'd like. Print one message if the **if** part of the statement evaluates to true, and another message in the **else** part of the statement.

5. In your program, write a statement that demonstrates the use of the conditional operator (?:) and prints a message based on the result. For example:

```
String message = "If you see " + str1 + " you should " +  
    ( str1.equals( "Boba Fett" ) ? "Run!" : "Walk." );  
System.out.println( message );
```

## HAND IN

Before handing in, create two additional files in your lab directory:

1. Create a README that contains the following:
  - a. Your contact information (name, class, lab session), TA name, and assignment number.
  - b. A brief (one paragraph at most) description of the assignment.
  - c. Instructions explaining how to run your code. While it is possible that some TAs will compile, run, and test your code in Eclipse, it is also possible that they will want to compile and run it from the command line. You should include instructions on how to compile and run each of the executable Java classes.
2. Create a file titled "SampleOutput" showing the results of running your code. (You may copy and paste from the Eclipse console). If appropriate, please include a comment above the output for each section (e.g. "#OUTPUT FOR SECTION 1" ) and put a few blank lines between each section.

Hand in by uploading the compressed (i.e. "zipped") folder containing your assignment files to Blackboard.