## CSCI 161 Exam \#1 Online Problem - EXAMPLE

This portion of the exam is open book and notes (your own only, of course). You may not consult anyone other than the instructor during this portion of the exam. You MAY use any code that you have previously developed in order to complete this question.

Develop a Java program for the problem described below. You do not need to include many comments, but do include your name in a comment at the top of your program file. You may submit multiple times during the exam (as many times as you want to), so when you get a version that cleanly compiles, you should probably submit it. Submit as Exam1. When you are satisfied with your work, or run out of time, submit your program one last time.

Description: Write a complete program that converts 0 through 32 degrees Fahrenheit to Celsius and produces the table below as output. You must use a for loop to display the values in the table, and the degrees Celsius must be calculated using a formula based on the degrees Fahrenheit. Get your columns to line up as shown, don't forget the headers and format the Celsius values to two decimal places!

Basic formula for converting degrees Celsius to Fahrenheit: $\quad$ Celsius $=(5 / 9) \times($ Fahrenheit -32$)$
Input Specification: No input is required.

## Output Specification

| Fahrenheit | Celsius |
| :--- | :--- |
| 0 | -17.78 |
| 1 | -17.22 |
| 2 | -16.67 |
| 3 | -16.11 |
| 4 | -15.56 |
| 5 | -15.00 |
| 6 | -14.44 |
| 7 | -13.89 |
| 8 | -13.33 |
| 9 | -12.78 |
| 10 | -12.22 |
| 11 | -11.67 |
| 12 | -11.11 |
| 13 | -10.56 |
| 14 | -10.00 |
| 15 | -9.44 |
| 16 | -8.89 |
| 17 | -8.33 |
| 18 | -7.78 |
| 19 | -7.22 |
| 20 | -6.67 |
| 21 | -6.11 |
| 22 | -5.56 |
| 23 | -5.00 |
| 24 | -4.44 |
| 25 | -3.89 |
| 26 | -3.33 |
| 27 | -2.78 |
| 28 | -2.22 |
| 29 | -1.67 |
| 30 | -1.11 |
| 31 | -0.56 |
| 32 | 0.00 |
|  |  |

I strongly suggest building in small increments so that you always have something that compiles. A program that is nearly complete and cleanly compiles will receive more points than a complete program that does not compile! Remember that you may submit early versions of the program as many times as you like!!

