Assignment 1

CGS3416, Java for Non-Majors, Fall 2017

DUE: 09/25/17 at 11:59:59pm

Objective:

To practice with basic variable declaration, input/output, simple arithmetic calculations and conditional statements (if-else statements).

Task:

Create a java application called GradeCalculator (name of the project and name of the class, and hence the file you submit for grading will be called GradeCalculator.java).

Prompt the user to enter grade values (you can assume these are whole numbers) for:

4 homework assignments and 2 tests. *Import scanner to prompt

You do not have to check to see if what the user enters is valid, you may assume the user follows directions properly.

Calculate the final grade using the following:

Homework Average = 40% of final grade, Test 1 = 30% of final grade and Test 2 = 30% of final grade

The final grade should be exact (no loss of data, so be weary that the average may be a decimal

value). And determine the letter grade based on the following scale.

Letter Grade	Numerical Range
A	92.00 - 100
A-	90.00 - 91.99
B+	88.00 - 89.99
B	82.00 - 87.99
B-	80.00 - 81.99
C+	78.00 - 79.99
C	72.00 - 77.99
C-	69.00 - 71.99
D	62.00 - 68.99
D-	60.00 - 61.99
F	0.00 - 59.99

Your code should produce output that looks EXACTLY like the following (may vary based on numerical values that the user enters when prompted).

SAMPLE OUTPUT FROM RUN 1:

Welcome to the 2013 Java Gradebook!

Please enter grades for the following:

Homework 1:90

Homework 2:99

Homework 3:38

Homework 4:100

Test 1:80

Test 2:89

Your final grade in the course is: 83.4

Your letter grade is B

Thanks for using the grade calculator, goodbye!

SAMPLE OUTPUT FROM RUN 2:

Welcome to the 2013 Java Gradebook!

Please enter grades for the following:

Homework 1:100

Homework 2:0

Homework 3:29

Homework 4:92

Test 1:100

Test 2:100

Your final grade in the course is: 82.1

Your letter grade is: B

Thanks for using the grade calculator, goodbye!

Make sure to test your program with a variety of different inputs. The Sample Runs above are just that -- examples, only. Never hard-code your programs to work for only one or two test cases. Your program should work and calculate the correct results for any set of valid inputs.

General Requirements:

● Use the Scanner class for keyboard input

● When you write source code, it should be readable and well-documented. BE SURE TO INCLUDE your name, date, and course at the top of the .java file you submit in a comment.

Submitting:

ONLY submit your GradeCalculator.java code file to blackboard under the submission link for assignment 1. You can navigate to this file on your computer (we will go over how to find it in class).

NO OTHER FILES/FORMS OF THE PROGRAM WILL BE ACCEPTED.

DO NOT EMAIL ME YOUR CODE.

You must submit only your .java code file. Make sure the name matches "GradeCalculator.java" exactly, and upload before the due date/time. If you need to upload twice to fix an error, this is fine so long as the last upload of your code comes in before the deadline. Only your LAST submission will be graded.