Programming Assignment 3: Computing Quality Points

Write a Java program that converts a letter grade to the corresponding number of quality points.

Use the following design for this program: Write a main class with a main method and a separate method named computeQualityPoints with the header:

```java
public static double computeQualityPoints(String grade)
```

The main method should request a letter grade from the user, then call computeQualityPoints to convert the grade to quality points (or grade points), and display the quality points.

The grade should be entered as a letter grade possibly with a modifier, e.g. B, C+, A-. The university catalog describes how the quality points are determined. (See page 51 of the 2015/16 undergraduate catalog.)

Notes:
- Use JOptionPane dialogs for input and output. Prompt the user for the input.
- Document the program with comments as we have illustrated in the programs encountered in the lab assignments. Be sure to include Javadoc comments for the method computeQualityPoints.
- Follow the programming style we have illustrated in terms of indentation, meaningful identifiers, and spacing.

Extra Credit:

Have your program make sure the grade entered is valid. Print an error message if it is invalid.

Turn in:
- Listing of the source code of your program.
- Copy of the output from three executions of the program along with the data that generated that output.
- E-mail a copy of your source code file to your instructor as an e-mail attachment.

The project is due at 4:00 p.m., Friday, November 13.

This assignment is to be completed by each student individually. It is governed by the Help Policy described below.

Assignment Type: Individual

Help Policy In Effect for This Assignment: Individual Project Without Collaboration.

In particular, you may receive help from the following persons, in addition to an instructor in this course: NONE. You may use the following materials produced by other students: NONE.