

Assignment #1

Requirements:

- Write a class named `TimeCalculator` that reads two times in military format (0850, 1710) and prints the number of hours and minutes between the two times.
- The program asks the user to input two times in military format, and then prints results. All input and output should be handled in `TimeCalculator` class. The main method should start by displaying these prompts in this exact format:

Please enter the first time:

Please enter the second time:

Read in the user input and execute the appropriate command, then display the result in this exact format:

The duration between these two times is (fill in your result) hours (fill in your result) minutes

- The class `Date` in `java.util.Date` is not allowed in this assignment

Example

A real example is looked like this:

Please enter the first time: 0900

Please enter the second time: 1730

The duration between these two times is 8 hours 30 minutes

Special case:

The first time is later than the second. A real example is looked like this:

Please enter the first time: 1730

Please enter the second time: 0900

The duration between these two times is 15 hours 30 minutes

Note: if the two times are the same (i.e. 1730 1730), then treat these two times as exactly the same time and the duration will be 0.

Extra point

Extra credit (7%+ extra 1%) if you can deal with the invalid input and ask the user for a valid input again.

A real example is looked like this:

Please enter the first time: 2570

Please enter the second time: 2590

Invalid Input! The input should be military format (i.e. 0850, 1710), please enter your input again.

Submission: Your Java project is named `yourStudentID_HW1`. Put all files in a folder and compressed it. Submit your assignment on eCourse2 under HW1. No other submissions will be graded and points will be deducted for late submission.

Academic dishonesty: You may not do work for another student nor may any student copy or plagiarize someone else's work. Severe penalties will be imposed on all parties involved.

Deadline: Tuesday, October 27, 2020. (end of the day)

