Time

The time can be very useful! We'll write a Java class to store information about the time.

Instance Variables

The Time class should be able to keep track of:

- hour, minute, second
  - Let hour be from 00 to 23 (24 hour Time)

Constructors

- `Time()` will set the time to 1:11:11.
- `Time(hour, min, sec)` will set the time according to the provided parameters.

Methods

- `toString()` should return a String with this format:
  - Hour:Minute:Second   ex: 14:37:18
- Appropriate `getters and setters` for each instance variable

- `getDifferenceFrom(Time)`

  - Return difference in seconds from other Time to this Time
  - If this Time is earlier than other Time, then the value will be negative
  - Note: this should NOT change any of the other Time's values!
- `isEarlierThan(Time)` and `isLaterThan(Time)`
  - Should use `getDifference()` to return an appropriate boolean value
  - If the Times are the same, return false

Submission

Turn in `Time.java` through Haiku.

Rubric (Out of 10)

+2: Your instance variables keeps track of time and date.

+2: You have two working constructors that work as specified.

+1: Your `toString()` method returns the correct String.

+2: You have appropriate getters and setter methods.

+2: Your `getDifferenceFrom()` method returns the correct values.

+1: Your `isEarlierThan()` and `isLaterThan()` methods work correctly.