< Object Oriented Programming - Assignments #4>

1. Implement a class Clock whose getHours and getMinutes methods return the current time at your location. (Call java.time.LocalTime.now().toString() and extract the time from that string.) Also provide a getTime method that returns a string with the hours and minutes by calling the getHours and getMinutes methods. Provide a subclass World-Clock whose constructor accepts a time offset. For example, if you live in Seoul, a new WorldClock(-14) should show the time in New York, forteen time zones behind. Which methods did you override? (You should not override getTime.)

   Eccential Methods:
   [Clock.java] which is a superclass
   - getHours
   - getMinutes
   - getTime

   [WorldClock.java] which is subclass of the superclass Clock
   - getHours : Override Method

   ※ WorldClock class does not overide the getTime method.

   [Score Criteria]
   - Comments in javadoc format for all classes and methods [1pt]
   - Implementing the getHours, getMinuties, getTime method of Clock class [1pt]
   - Implementing the appropritate constructor to set the offset value and the getHours overiding method of WorldClock class [1pt]
   - Do not override the getTime method in WorldClock class [1pt]
   - Implementing the WorldClockDemo.java to test the WorldClock class [1pt]
   - Providing the appropriate output results and documentation (submission with external report combining all the sourcecode) [1pt]
   - Code accuracy with the various input cases [1pt]

   [Example Prompt Result]

```
Base Time in Current Time-Zone
Hours: 14
Minutes: 23
Time: 14:23

World Clock Offset: -14
Hours: 0
Minutes: 23
Time: 0:23
```