COMP 1409 Lab 6-b

Take-home lab

Extend your Player class from lab 5-a. Add the constants below for conversion factors and pay rates. There must be no "magic numbers" in your code.

```
public static final int IN_PER_FOOT = 12;
public static final int BASE_RATE = 60;
public static final int TALL_INCHES = 74;
public static final double HEAVY_POUNDS = 190.0;
public static final int TALL_HEAVY_BONUS = 5;
public static final int SCORES_BONUS = 4;
public static final int DRINKS_DEDUCTION = 10;
```

Add the following methods:
• **`public String convertHeightToFeetInches()`** Converts height to feet and inches and returns this information as a String, e.g. 68" becomes "5 feet 8 inches".

• **`public int calculateGamePay()`** Calculates a player's game pay and returns the amount. Everyone starts with the BASE_RATE. Tall, heavy players (both tall and heavy) receive an game bonus of TALL_HEAVY_BONUS. Tall means TALL_INCHES inches or more, heavy means at least HEAVY_POUNDS pounds. Players who are goal scorers in the game receive an extra SCORES_BONUS. However, players who drink beer have DRINKS_DEDUCTION per game deducted from their pay.

• **`public void displayPlayerDetails()`** Displays all the player's information on the screen. It must invoke methods convertHeightToFeetInches() and calculateGamePay().
Example display:
```
Name: Butch Bouchard
Height: 6 feet 0 inches
Weight: 175.0 pounds
Scores: true
Drinks: false
Game Pay: $64
```

Finally, create a driver class that creates players and test the various outcomes for pay calculations.

The take-home lab is due by the time indicated on the dropbox. Labs not in the dropbox by the deadline will not be marked.