6.092: Assignment 2

Foo Corporation needs a program to calculate how much to pay their hourly employees. The US Department of Labor requires that employees get paid time and a half for any hours over 40 that they work in a single week. For example, if an employee works 45 hours, they get 5 hours of overtime, at 1.5 times their base pay. The State of Massachusetts requires that hourly employees be paid at least $8.00 an hour. Foo Corp requires that an employee not work more than 60 hours in a week.

Summary of Rules

- An employee gets paid (hours worked) \( \times \) (base pay), for each hour up to 40 hours.
- For every hour over 40, they get overtime = (base pay) \( \times \) 1.5.
- The base pay must not be less than the minimum wage ($8.00 an hour). If it is, print an error.
- If the number of hours is greater than 60, print an error message.

Directions

Create a new class called FooCorporation.

Write a method that takes the base pay and hours worked as parameters, and prints the total pay or an error. Write a main method that calls this method for each of these employees:

<table>
<thead>
<tr>
<th>Base Pay</th>
<th>Hours Worked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee 1</td>
<td>$7.50</td>
</tr>
<tr>
<td>Employee 2</td>
<td>$8.20</td>
</tr>
<tr>
<td>Employee 3</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

Submission Instructions

Submit your FooCorporation.java file via Stellar.

Hint

Do not try to write the entire program in one go. It is much easier to write a small piece and test it, then write another small piece and test it. For example, start by writing just a skeleton of your method and your main program. Then add the code to do the normal salary computation, without any special rules. Then add each additional rule, one at a time. You should test your program with simple test inputs to check that you handle each case.

Good luck!
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