**Assignment 3**

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

**Directions**

Create a new class called FooCorperation.

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:

|  |  |  |
| --- | --- | --- |
|  | Base Pay | Hours Worked |
| Employee 1 | $7.50 | 35 |
| Employee 2 | $8.20 | 47 |
| Employee 3 | $10.00 | 73 |

**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 each additional rule, one at a time. You should test your program with simple test inputs to check that you handle each case.