

## 1. Programming Lab 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.

## 2. Summary of Rules

- An employee gets paid  $(\text{hours worked}) \times (\text{base pay})$ , for each hour up to 40 hours.
- For every hour over 40, they get  $\text{overtime} = (\text{base pay}) \times 1.5$ .
- 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.

## 3. 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:

	BASE PAY	HOURS WORKED
EMPLOYEE 1	\$7.50	35
EMPLOYEE 2	\$8.20	47
EMPLOYEE 3	\$10.00	73

## 4. 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