HERE's a way to get started on this before next week.

Write a complete C++ program, including comments, to do the following:

The program will compute a weekly payroll. It will read in information for each of the employees of a company. For each employee, it will compute a series of calculations and then print the results. After processing the last employee, the program will print the total number of employees processed. **For now, send output to cout.**

1. The program will do the following for each employee:

First, it will read in the data values for this employee. Each employee will have a 3-digit identification number (the ID will be an integer), hours worked, rate of pay, and managerial status (1 if the employee is a manager, 0 if not). For example, here are data values for two typical workers:

123	46	6.50	1	(ID # 123 is a manager)
456	32.5	3	0	(ID # 456 is not a manager)

Let your prompt guide the user to enter a 3-digit ID number. Your program should NOT test whether the ID number is in a valid range.

2. The program will compute the weekly pay, which includes an overtime bonus; an employee who works more than 40 hours per week is paid time and a half for each hour over 40. Your computation should use the following formula: **JUST WRITE BOTH FORMULAS for now: don't try to figure out how to combine them.**

if hours are 40 or less, weekly pay is the number of hours times the rate of pay but

if hours are more than 40, weekly pay is 40 times the rate of pay **plus** the number of overtime hours times 1.5 times the rate of pay

For example, id # 123, who worked 46 hours, would earn 40 * 6.50 + 6 * 1.5 * 6.50 id # 456, who worked 32.5 hours, would earn 32.5 * 3

(Another way of computing this is to figure that an employee who works 46 hours at 6.50 per hour earns 6.50 for each of 46 hours, and another half of 6.50 for 6 hours.)

3. The program will compute the bonus, which is 10% of the weekly pay for anyone who is a manager. **Omit the bonus for non-managers for now.**

4. The program will compute net pay, which is weekly pay plus the bonus.

 The program will print all of the data values read in and the number representing managerial status, (don't try to print the words) plus each item that was computed (weekly pay, bonus, and net pay).
<u>Make sure that all monetary amounts a dollar sign.</u> (ignore number of decimal places for now).

6. Then the program will skip two lines and go to the next employee.

After the last employee has been read, the program should print the total number of employees that have been processed. (This count should not include a phony employee used to end the set of data.)

Your program must use the phony value method to determine that the last employee has been read. Explain your phony value in a comment. **Forget about sending it to Codelab for now.**

OUTPUT FORMAT: Here is a sample set of output for two employees (note that your messages must be the same as these if you are going to test your answers in CodeLab; note that hours also has 2 decimal places). Don't forget to set the number of decimal places in the output file!

employee 123 worked 46.00 hours at \$6.50 per hour 1 weekly pay \$318.50 bonus \$31.85 net pay \$350.35

employee 456 worked 32.50 hours at \$3.00 per hour not a manager weekly pay \$97.50 net pay \$97.50

We processed 2 employees

This output will go to the screen.

DATA: Have at least 10 employees. Make sure that at least 4 are managers and at least 4 are not. Make at least 4 worked overtime and 4 did not (and cover all possible combinations of managerial status and overtime).

Make sure that <u>several of your values are easy integers</u> (such as hours 41 and rate 10) so that I can check the calculations by hand, but also make sure that a few have decimal places (e.g., 6.50 per hour or 30.5 hours). Use different values for hours and rate for each employee.