Comp 110L

Putnam

Project 3: Payroll Statement　　　　　　　(Work in groups of 2)

　　　15 pts

1. **Using the information in Liang page 64, Programming Exercise 2.11, write a program that inputs the following information:**
   - **Employer's name (e.g., John Smith)**
   - **Number of hours worked in a week (e.g., 10)**
   - **Hourly pay rate (e.g., 6.75)**
   - **Federal tax withholding rate (e.g., 20%)**
   - **State tax withholding rate (e.g., 9%)**

   computes
   - **gross pay**
   - **federal withholding**
   - **state withholding**
   - **total withholding**
   - **net pay**

   and prints a payroll statement.

   Write this program using console input and output, i.e., use Scanner for all input and use System.out.print( ) and System.out.println( ) for all output. A sample run of the program is shown in the Programming Exercise 2.11.

   The output of your program <u>must look exactly the same as shown in the text</u>.

   That is part of the difficulty of this assignment.

   <u>Use only java methods or operations that are in Chapter 1 or 2 of the text</u>.

   DO NOT use *ifs, loops, or special formatting methods, e.g., printf( )*.

   Use the programming code conventions from Section 2.13 of text.

2. **To get full credit for this program you need to make sure that all dollar amounts printed out have no more that 2 digits after the decimal point. You should truncate the extra digits. For example $234.15678 should be written as $234.15. You will have no way to force the system to**

print $10.50 instead of $10.5; if you were allowed to use printf( ) that would solve the problem. There may be rounding errors. Please indicate those errors.

3. This project requires NO design documents.

4. Before you write the program, establish three <u>good</u> test cases for your program!

5. Instructors Test Case:
   - hours worked = 25.0
   - hourly pay rate $10.54
   - federal withholding rate 0.19
   - state withholding rate = 0.07.

6. Compile and run your program on jgrasp.

7. Correct any run-time errors in your program.

8. Check that your program matches
       a. your test cases,
       b. the test case in the text.

9. Correct any logic errors in your program.

10.   Run instructors test case.

11. Submit
    - source code,
    - results of the test case runs copied
        o as comments onto the end of your source code or
        o into a new JGrasp window for separate printing.
    - test cases

12. Put the <u>names of both people</u> in your group on all the material handed in, and make sure that only one copy of the project is submitted for grading.

13. The java source code <u>must</u> have a header formatted as follows:
    /* Project 3: Payroll Statement
       Programmers:
       Section #:
       Date:
       Description:
    */