

WORKSHEET 05A – In class on week 2 day 3

	<p>Reading/studying C. 5.1-5.4</p> <ul style="list-style-type: none"> • Textbook • Slides • Chapter Summary (at the end of the chapter lessons) <p>Keep your notes</p>						
	<i>Do pair programming for the following problems, switching every 7 minutes.</i>						
1	<p>ElevatorSimulation2: Write a console program to use <i>relational operators</i>:</p> <p>This is to simulate the usage of an elevator with 19 floors, where the floors are numbered so that there is not a floor numbered 13:</p> <table border="1"> <thead> <tr> <th>Floor Number</th><th>Actual Floor</th></tr> </thead> <tbody> <tr> <td>1-12</td><td>1-12</td></tr> <tr> <td>14-20</td><td>13-19</td></tr> </tbody> </table> <p>a) Download ElevatorSimulation2ATDP.java from your instructor b) Complete the code</p> <p>Use the debugger to “step” to understand the flow of control</p>	Floor Number	Actual Floor	1-12	1-12	14-20	13-19
Floor Number	Actual Floor						
1-12	1-12						
14-20	13-19						
2	<p>P 5.2: Write a console program to calculate tax amount, using nested and multi-way “if” Use the debugger to “step” to understand the flow of control</p>						
	<i>(cont. next page)</i>						

3 **PayCheck**

Create a class named PayCheck with the 3 parts:

Fields:

- employee's Name: String
- hourly wage: double
- hours worked: double

Constructors:

- + PayCheck
 - param: employee's name, of type String
 - param: hourly wage

Methods

- + addHours:
 - param of double type: hours to be added to hours worked
- + raisePay:
 - param of double type: dollar amount to increase the hourly wage
- + calcWeekPay:
 - return of double type: dollar amount of the pay,

Note:

 - *The pay amount is the result of multiplying hourly wage by hours worked*
 - *If the number of hours worked is more than 40, then the amount of time beyond 40 is 1.5 times the hourly wage*
 - *Reset the number of hours worked to zero*
- + toString:
 - return of String type: a sentence including employee's name, hours worked, hourly wage, shown as underlined in the following example:

Golden Bear worked for 45.0 hours at \$15/0 per hour

Download **PayCheckPrinter.java** from your instructor to test with your class.

The following is the result from running PayCheckPrinter:

Golden Bear worked for 14.0 hours at \$12.0 per hour
This week's pay is \$168.0
Golden Bear worked for 26.0 hours at \$13.0 per hour
This week's pay is \$338.0
Golden Bear worked for 38.0 hours at \$14.0 per hour
This week's pay is \$532.0
Golden Bear worked for 50.0 hours at \$15.0 per hour
This week's pay is \$825.0

- Copy the source code from each other to keep – each student must have the working code.
- Submit online: .java files.

THE END