



CIS 3270 Assignment #2: Java Language Basics

Due Date: September 6th

Instructions:

1. Do you know how Georgia residential electricity bill is calculated? Well, find it out at <http://www.psc.state.ga.us/calc/electric/GPcalc.asp>. Write a Java program to calculate the total due based on the usage (KWh) and season (summer and winter); you do not need to consider senior citizen discount or merger transition credit. You need to use conditional flow statements to determine the rates. You also need to declare an “int” variable for the usage. In your program, assign “800” to the usage variable and print out the total due for both summer and winter on the screen.

Hint: Total due = Base charge + Cost at base rate + Cost at 2nd tier rate + Cost at 3rd tier rate + Fuel Rider Cost

$$\text{Fuel Rider Cost} = \text{Fuel recovery rider rate} * \text{Total usage}$$

2. Programmatically (using nested loop) print out the following pattern on the screen nicely (the first number in each cell represents the row number and the second one represents the column number). You need to declare and use two “int” variables: the number of rows and the number of columns. So the actual output will change accordingly if the number of rows/columns is changed. For example, the following example is printed when the number of rows is set to 3 and the number of columns is set to 4.

Source code: ...
 int row = 3;
 int col = 4;
 ...

Output: 1, 1 1, 2 1, 3 1, 4
 2, 1 2, 2 2, 3 2, 4
 3, 1 3, 2 3, 3 3, 4

Submission: for each exercise,

- A screenshot of the JDeveloper environment (with running result);
- Complete source code, printed out separately (pasted in Word).

Note: screenshots need to be complete and original, no graphic editing. Clearly name and label all screenshots and source code.