**Lab 04 – Salary**

Open BlueJ, and create a new BlueJ project titled **Lab04-Salary** in your CS\LABS folder (H:\CS\LABS).

Create a new class with this code skeleton:

//Name:

public class PracticeProblems

{

public static void main(String[] args)

{

}

}

REMEMBER – printed text is *concatenated* together with the plus sign (+), like this:

int age = 44;

System.out.println("You are " + age + " years old");

**Would print:** You are 44 years old

Java abides by the order of operations, so make sure you brush up on your PEMDAS! Also, when adding a String and a number, the String wins! It doesn’t make sense to perform addition on a String and an int, but it makes perfect sense to concatenate them together!

**Before each problem, insert a COMMENT with the problem number.**

1. Declare two String variables, greeting1 and parent1*,* and set them equal to “hi, ” and “Mom”. Write the code to print the **concatenation** of the two variables:

hi, Mom

1. Declare two String variables, greeting2and parent2, and set them equal to “Good Morning” and “Dad”. **Using one println statement**, write the code to print:

Good Morning, Dad!

1. Declare a String variable called someName, set it equal to “Doc”, and, using one print statement, write the code to print:

What’s up, Doc?

1. Declare an integer variable points with the value 1200 and a String variable playerName with the value of your name. Using one print statement and the value of the variables, write the code to print:

High Score: Sarah - 1200 points

1. (Riddle) The poor have it, the rich need it, and if you eat it you will die? What is it?
2. Complete the ‘Worksheet – Concatenation’ (Excel file.) Make sure to save it when done.

**Salary Calculation App**

In your current project, create a new class with this code skeleton:

//Name:

public class Salary

{

public static void main(String[] args)

{

}

}

Make three new double variables: hourlyRate, hoursWorked, and overtimeHours*.*

Set your own values to the variables. (If you use the values in the sample output, it will help you know if you got the math correct.)

Next, calculate the total (non-overtime) salary by multiplying hoursWorkedby hourlyRate*.* Save the result into a new variable calledtotalSalary.

Next, add the amount of money you made during overtime to the totalSalary variable. During every hour of overtime, you are paid 1.5 times your normal hourly rate. This is now your correct salary for the hours you've worked.

The government is also insisting we pay taxes. In fact, they want 25% of everything you earn. Make a new double variable called taxRate, and set it equal to 0.25. Calculate the amount of money that you make after taxes in a new double called netSalary*.*

Format your output to look like this:

Hourly rate >>> $10.0

Regular hours worked >>> 40.0

Overtime hours worked >>> 10.0

Total salary (before taxes) >>> $550.0

Net salary (after taxes) >>> $412.5

**Use concatenation** so that this output uses exactly **6** **println statements** (one per line).

Try using different numbers in hourlyRate, hoursWorked, and overtimeHours to see that all your calculations work correctly.

When done, make sure your numbers are set such that your output matches the sample output.