Module 8 Assignment – File I/O

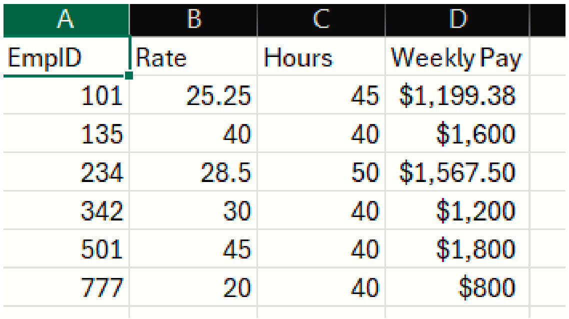
Instructions

In this assignment, you will process a CSV input file. CSV stands for comma-separated value file. A CSV file is a text file, even though you can open it in Excel. A CSV file can also be opened in text editors like Notepad.

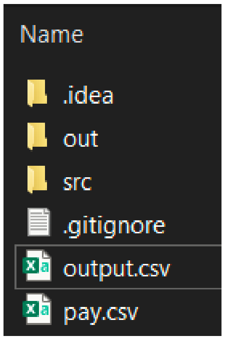
CSV is a common data interchange format, sort of like JSON. If you import CSV data in Excel, for example, you have to choose the From Text/CSV option.

You can put all of the code for this program into the main() method. No separate methods are required. There are examples that use separate methods, or that use FileWriter instead of BufferedWriter. You can use whatever you can get to work to produce the following results:

1. Read the data from the input file pay.csv
2. Use the pay rate in column 2 and the hours worked in column 3 to compute the weekly pay, including overtime pay (payrate is 1.5 times the regular pay rate for all hours worked over 40)
3. Write the data, including the weekly pay, to an output.csv file.
4. Nice to have:
    a. Format the weekly pay to 2 decimal places and add a currency symbol
    b. Add column headings in row 1



A	B	C	D
EmpID	Rate	Hours	Weekly Pay
101	25.25	45	$1,199.38
135	40	40	$1,600
234	28.5	50	$1,567.50
342	30	40	$1,200
501	45	40	$1,800
777	20	40	$800



Name

.idea
out
src
.gitignore
output.csv
pay.csv

Break this program up into work steps. Complete a step and rest. Example: open and read in the data file. If you can figure out where your IDE likes you to place input/output files, you can use a relative path for the file location. Screen shot example above.

String inputFile = "pay.csv";

Note: when you want to create the String outputLine that you will write to the output.csv file, those doubles have to be added to the line as Strings.

Hint: when you format the weekly pay to 2 decimals, it becomes a String.

Error example:

You pull the pay rate and hours worked numbers from the CSV file into local variables and try to compute weekly pay. What can go wrong here?

```
java: bad operand types for binary operator '*'
  first type:  java.lang.String
  second type: java.lang.String
```

What does it mean? The data comes over as String. You have to parse it using the wrapper class Double.

Push your Java file to GitHub. No need to submit pay or output CSV files.