

**Unit Nine Assignment One:**

Write a superclass Worker and subclasses HourlyWorker, SalariedWorker, and PieceWorker.

When writing the superclass, please take into consideration the following pieces of information.

- All workers have a name(First Last) and an hourly wage rate. It is recommended that the number of hours not be an instance field of the superclass.
- All subclasses will need to call a method

```
public double computePay(int hours)
```

to multiply the number of hours worked times the hourly rate of pay.

- All subclasses will need to call a method

```
public String getName()
```

to convert (First Name Last Name) into (Last Name, First Initial.).

An object of type HourlyWorker has a name, an hourly wage rate, and the number of hours worked. In addition to the parametric constructor, this subclass should have a method

```
public double Wage()
```

An hourly worker gets paid the hourly wage for the actual number of hours worked if hours, is at most 40. If the hourly worker worked more than 40 hours, the excess is paid at time and a half.

An object of type SalariedWorker also has a name, an hourly wage rate, and the number of hours worked. In addition to the parametric constructor, this subclass should have a method

```
public double Wage()
```

The salaried worker gets paid the hourly wage for 40 hours, no matter what the actual number of hours is.

An object of type PieceWorker has a name, a low hourly wage rate, and the number of hours worked. In addition to the parametric constructor, this subclass should have a method

**public double Wage(int pieces)**

The piece worker gets paid the hourly wage for all hours worked (no time and a half for overtime) plus income for each piece completed. Do not use the number of pieces completed as an instance field of this subclass.

The PieceWorker subclass should also have a method

**public double computePay(int numOfPieces)**

Notice this is the same as a method in the superclass! This method should be called from Wage() and return the numOfPieces times \$0.12.

The driver class that tests the superclass and its subclasses, should have a default constructor, a main method, and 3 member methods: TestHourly(), TestSalaried(), & TestPiece(). The last 3 methods should determine and print to a JFrame the income of these 3 people...

Type	Name	Wage Rate	Hours	Number of Pieces
----	----	-----	-----	-----
Hourly	John Doe	9.48	43	n/a
Salaried	Karen Jones	25.76	52	n/a
Piece	Wesley Smith	5.65	36	1025

Your JFrame should look like the one attached to this assignment.

To complete this assignment, paste your JFrame into a Word document and turn it in with Worker.java, HourlyWorker.java, SalariedWorker.java, PieceWorker.java, and u9a1.java.