

Assignment 09 – Java Concepts Chapter 10: Inheritance
Due: Monday, Dec 8th.

Exercise P10.6

Write a superclass `Worker` and subclasses `HourlyWorker` and `SalariedWorker`. Every worker has a name and a salary rate. Write a method `computePay(int hours)` that computes the weekly pay for every worker. 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. The salaried worker gets paid the hourly wage for 40 hours, no matter what the actual number of hours is. Supply a test program that uses polymorphism to test these classes and methods.

Use the following class as your tester class:

```
/**
 * This class tests class Worker and its subclasses.
 */
public class WorkerTester
{
    public static void main(String[] args)
    {
        Worker s = new SalariedWorker('Sally', 40);
        Worker h = new HourlyWorker('Harry', 40);
        System.out.println(s.computePay(30));
        System.out.println('Expected: 1600');
        System.out.println(h.computePay(30));
        System.out.println('Expected: 1200');
        System.out.println(s.computePay(50));
        System.out.println('Expected: 1600');
        System.out.println(h.computePay(50));
        System.out.println('Expected: 2200');
    }
}
```

Put a copy of your source code files, into a **.zip** file named **CS125-A09-YOURNAME.zip**. The only thing in the zip should be a your source files, & possibly some folders to organize them. Note: if you have trouble creating zip files in the labs, refer to my tutorial on my CS104 course page.

Upload the **.zip** file to Moodle.

The following rubric will be used for grading:

Description	Points
Correct filename(s) are used	1
Source code content – 4 classes implemented as indicated in text	6
Source code compiles without errors	3
Program executes	2
Program output is correct	4
Any/all classes are documented	3
Any/all methods & constructors are documented	4
Any/all parameters and return values are documented	2
TOTAL POSSIBLE POINTS:	25