CMPE419 LAB III

Due March 13, Friday, 2020.

INHERITANCE

LABORATORY EXERCISES

1. 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 are at most 40. If the hourly worker worked more than 40 hours, the excess time is paid at 150%. The salaried worker gets paid the hourly wage for 40 hours, no matter what the actual number of hours is.
2. Implement a superclass **Person**. Make two classes **Student** and **Instructor** that inherit from Person.

You are required to model **students** and **teachers** in your application. You can define a superclass called **Person** to store common properties such as **name** and **address**, and subclasses **Student** and **Teacher** for their specific properties.

For students, you need to maintain the courses taken and their respective grades;

* add a course with grade,
* print all courses taken and the average grade.
* A student takes no more than 30 courses for the entire program.

For teachers, you need to maintain

* the courses taught currently,
* add a course taught
* remove a course
* A teacher teaches not more than 5 courses concurrently.

