COSC 1336 – Programming Fundamentals I
Program 12 – Classes and Object-Oriented Programming

The owners of the Annan Supermarket would like to have a program that computes the weekly gross pay of their employees. The user will enter an employee's first name, last name, the hourly rate of pay, and the number of hours worked for the week. In addition, Annan Supermarkets would like the program to compute the employee's net pay and overtime pay. **Overtime hours, any hours over 40, are paid at 1.5 the regular hourly rate.** Net pay is gross pay minus taxes (Refer to the tax table on the second page).

Define a class called **Employee.** The class must have **private attributes** to store the employee's name, hourly rate, and regular (≤ 40) and overtime hours worked. The class must also have member functions to perform the following tasks:

- A constructor function to initialize the hourly rate to the minimum wage of $7.25 per hour and the hours worked (regular and overtime) to 0.0.

- A function to get
  - the employee's name
  - the hourly rate
  - the hours work for the month (**by the week – assume 4 weeks in a month**)

- A function to return
  - the employee's name
  - the hourly rate
  - the total regular hours work for the month
  - the total overtime hours for the month

- A function to return
  - the monthly regular pay

- A function to return
  - the monthly overtime pay

- A function to display the output which must include the following information:
  - Employee's name
  - Total regular hours worked
  - Total overtime hours worked
  - Total hours worked
  - Pay rate
  - Monthly Regular Pay
  - Monthly overtime pay
  - Monthly gross pay
  - Monthly taxes
  - Monthly net pay

Write a main function that declares an object for the class defined and tests the functions written for the class. Allow the user to run the program as many times as possible until a sentinel name value, **no**, has been entered. No input, processing, or output should happen in the main function. All work should be delegated to other functions.

Tax Table

Bracket	If the gross pay is over	But not over	Tax
1	$0.00	$2,000.00	10%
2	$2,000.00	$3,500.00	15%
3	$3,500.00	$6,000.00	28%
4	$6,000.00	$10,000.00	31%
5	$10,000.00	N/A	36%

Run 1

Name: John Doe
Hourly rate: $35.10
Hours worked: 40, 30, 40, 35

Run 2

Name: Jane Doe
Hourly rate: $37.20
Hours worked: 40, 40, 40, 40

Run 3

Name: <Your Name (First Last) >
Hourly rate: $65.50
Hours worked: 50, 35, 40, 55

Run your program three times with the data above. Create a folder named, **fullname_program12**. Copy your source code and the output file to the folder. Zip the folder and upload it to Blackboard.