Advanced Programming (COMP231)

Second Semester 2013/2014

Assignment # 5   *Due Date: Wednesday(Saturday Schedule) 4-06-2014*

Notes:

1. The assignment should be submitted on the due date to your instructor in the lecture.

2. The assignments are *individual* effort and copying the assignment will be treated as a cheating attempt, which might lead to *FAIL* the course.
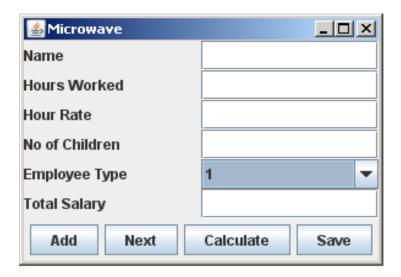
A company has two types of employees full-time and part-time employees. In order to calculate the weekly salary. The company needs to store the following data for each employee either full-time or part-time:employee name , hours worked per week, rate per hour and number of children. The company pays normal rate for the first 40 hours and 1.5 the normal rate for each hour worked over 40 hours. Only full time employees get 25 Shekels for each child. The total salary is taxed according to the folllowing critieria.

- For full time employee 5%tax if he or she has no children. And 10% if he has childrens.
- For part time employee 8% if his salary exceed 1000 Shekels per week.

Develop a Java application using inheritance and polymorphism to help the payroll employee to calculate the employees' salary. Your application should fulfill the fowllowing specifications:

- You should build a GUI as shown in figure 1 below.
- Your application should allow a user to save the employees' data in a file called employees.txt according to the structure below

Name	Hours	Rate	Children	Type
Ali	45	10	3	1(for full time)
Samar	50	11	4	2(for part time)

Add: Allows the user to add an employee object to the ArrayList

Next:Iterates over the employees stored in the Arraylist and display them on the GUI.

Calculate: calculates the total salary for an employee.

Save: stores the data from the ArrayList to the file employees.txt.

Important note:

- You should submit your assignment to your teacher on the lecture time at the lecture.
- You should submit a hardcopy printed one with your name, ID, and your section printed on it. Also, an electronic copy (CD), the electronic copy should have a) java source code b) the binary file (byte code) .class file.
- The class that contained the main method should be named Main, that class should be placed on the root directory.
- The person who will mark your assignment will insert the CD to the CD drive, then type Java Main, then your program should run, otherwise you will lose 30% of the assignment's mark.

GOOD LUCK