

## COM 102 – OBJECT ORIENTED PROGRAMMING POSTLAB #7

**Academic Year:** Spring 2016

**Date** : May 9 - Monday, 11.59pm (Submission)

**Course Instructor:** Assoc. Prof. Dr. I. Furkan INCE

**Course Assistant:** Res.Asst. Arzum KARATAŞ & Res. Asst. Feyza GALIP

### Write a Java Program

Let's assume that there is a textile company. This company pays its employees on a weekly basis. Each employee has a social security number, first name, last name, birthdate, mobile phone number, address information and has a capability to calculate weekly salary of oneself. In the company, there are four types of employees : Salaried employees, Hourly employees, Commission employees and Base-Salaried Commission employees.

Salaried employees are paid a fixed weekly salary regardless of how many hours they work. Hourly employees are paid by the hour and overtime pay as double of hourly salary for all hours worked in excess of 40 hours in a week. Commission employees are paid a percentage of their sales(eg. You can think that his wage = commissionRate\*salesAmount). As for Base-Salaried Commission employees, they receive a base salary plus a percentage of their salaries(eg. You can think that his wage =base salary+( commissionRate\*salesAmount)).

For the current pay period, the company has decided to reward salaried-commission based employees by adding 5% to their base salaries. Also, the company wants to give bonus 200 TL to the employee if the current week is the one in which the Employee's birthday occurs. Hence, you are supposed to develop a Java application that performs a salary calculation **polymorphically** for all employees of the company.

**Note that** first you need to draw UML class diagram for application and you need to show hierarchy between classes.

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### **NOTES & SUBMISSION RULES :**

1. You are **required to add comment properly**.(It will be graded)
2. You are **strongly advised** to obey the good programming practices ( like naming conventions, indentations, commenting your codes and so on.) Using good programming practices is graded.
3. You are **required** to send your source code within a zipped file named :  
**COM102\_ StudentNumber\_YourName\_PostLabX.zip**  
(e.g., COM102\_011XXXX\_ArzumKarataş\_PostLab7.zip  
COM102\_011XXXX\_FeyzaGalip\_PostLab7.zip)
4. **Be sure whether you attached your work to the e-mail or not**, because it is your responsibility to sending the work on time and in proper format.
5. You are required to **work alone**. Teamwork is **NOT** allowed and **cheating is strictly punished!**
6. You should **submit** your homework to the address following by **e-mail** on time.  
(to [com102.2016gediz@gmail.com](mailto:com102.2016gediz@gmail.com))
7. **Late submissions** will be graded by using the formula  **$100 - 10*d^2$**  where **d** is the number of **late submission days**.