



WOLLO UNIVERSITY
KOMBOLCHA INSTITUTES OF TECHNOLOGY
College of Informatics
Department of Information System (IS)
Object Oriented Programming, Assignment I

1. Create an interface with a name of Person which has a public access modifier.
 - ✓ include package with oop
 - ✓ Create a methods with name **getPerName(), getPerAge(), getFieldOfStudy(), and getPhoneNumber()**
2. Create an abstract class Employee that implement the supper interface Person
 - ✓ Create fields' **perName, perAge, fieldOfStudy, and phoneNumber.**
All are private
 - ✓ Declare private instance fields grossSalary ,netSalary, and pension
 - ✓ Create instance methods ***calcPension and calcNetSalary***
 - ✓ Create a constructor for Employee class and call the supper constructor while defining the constructor
 - ✓ declare use appropriate local variables and use it
 - calculate netsalary, pension ,and tax using the formulas:

grossSalary ≥5000	grossSalary ≥4000	grossSalary ≥3000	grossSalary ≥ 1500	grossSalary <1500
Rate=0.35	Rate=0.25	Rate=0.20	Rate=0.15	Rate=0.10

- ✓ **pension = 0.04 * grossSalary**
- ✓ **tax = grossSalary * rate**
- ✓ **netsalary = grossSalary - tax - pension**

3. Create a class **PermanentEmployee** that extends the supper class **Employee** and implements **person** interface

- ✓ Create fields' **perName, perAge, fieldOfStudy, and phoneNumber.**
All are private
- ✓ Declare private instance fields **overTimePerWeek**
- ✓ Declare instance method **calcTotalIncome** that return total income using formula :
totalIncome = overTimePerWeek * 80 + netsalary
- ✓ Create a constructor for **PermanentEmployee** class and call the supper constructor while defining the constructor

4. Create a class **TemporaryEmployee** that extends the supper class **Employee** and implements the interface **Person**

- ✓ Declare private instance fields **totalHour**
- ✓ Declare instance method **calcTotalPay** that return total income using formula :
TotalPay = totalHour * rate
- ✓ Create a constructor for **TemporaryEmployee** class and call the supper constructor while defining the constructor

5. Create a class **TestAllClass** with main function

- ✓ create an instance of all classes using appropriate object reference name
- ✓ try to display the objects of the class