

- I. **Part I:** You are hired to write a program to manage the income of professors and staffs.
- Both professor and staff are person, therefore you need to make sure professor and staff inherits from person.
 - Each professor has two sources of income: fixedSalary and teachingSalary.
 - Each staff has only one source of income: fixedSalary.
 - Professor and staff must pay tax using the same income tax rate (10%). The amount of tax is calculated as the total income multiplying with the tax rate. For example: if the salary of a staff is 1,000,000 and the tax rate is 10%, then he needs to pay 100,000 for tax.
 - The net income of a person (professor or staff) is the total salaries (income) after deducting tax. For the previous example of the staff, his net income is 900,000.
 - Please follow the requirements below:
1. Create a class IncomeTaxRateTable:
 - Contains the following data members with initial values:
 - incomeTaxRate = 10%
 - Contains the following methods:
 - void setIncomeTaxRate (double newIncomeTaxRate):
 - This method sets a new income tax rate
 - Print out all objects that affect by incomeTaxRate, for ex: all professors and staffs (see below)
 2. Create the following class:
 - Person (an empty class)
 - UniversityProfessor:
 - Inherits from Person
 - Contains members
 - fixedSalary (double)
 - teachingSalary (double)
 - Contains methods
 - double getTotalSalary () returns the sum of fixedSalary and teachingSalary
 - double getNetIncome(): returns totalSalary – totalSalary*incomeTaxRate
 - overload operator << to printout the fixedSalary, teachingSalary and net income of this professor
 - UniversityStaff
 - Inherits from Person
 - Contains members:
 - fixedSalary (double)
 - Contains methods
 - double getNetIncome (): returns fixedSalary - fixedSalary*incomeTaxRate

- overload operator << to printout the fixedSalary and net income of this staff
3. Write a main function that provides a text menu:

```
0 - Print tax rate info
1 - Create a professor
2 - Create a staff
5 - Change incomeTaxRate
Please enter your selection:
```

- 0 – Print tax rate info: print the value of incomeTaxRate
- 1 - Create a professor
 - Allow user to input fixedSalary and teachingSalary
 - Create a new object UniversityProfessor
 - Printout the new professor (using the overloaded << method)
- 2 - Create a staff
 - Allow user to input fixedSalary
 - Create a new object UniversityStaff
 - Printout the new staff (using the overloaded << method)
- 5 - Change incomeTaxRate:
 - Allow user to input the new incomeTaxRate
 - Call the method setIncomeTaxRate of TaxRateTable class