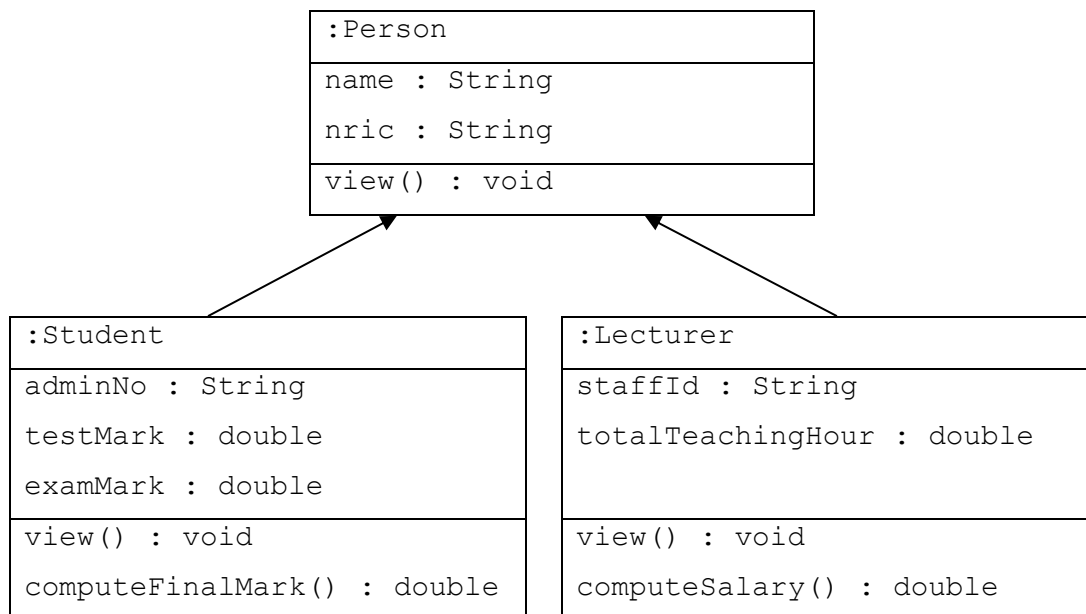


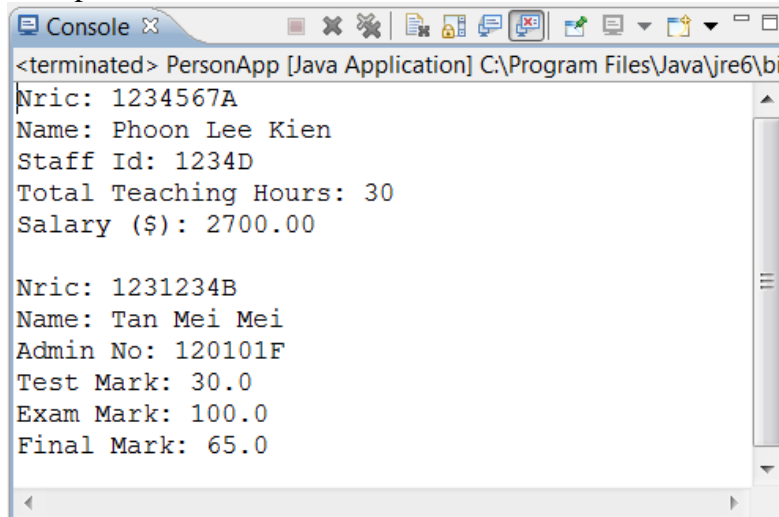
Practical 5 – Week 5 Inheritance

1. Implement the 3 classes as shown in the class diagram.
 - No constructors are to be defined and all attributes are private.
 - Include all accessor and mutator methods.
 - The method `view()` displays all information of a person on the screen.
 - The base mark of the test and exam is 100% and each contributes 50% to the final mark of a student.
 - The salary of a lecturer is computed using an hourly rate of \$90.



Write an application program `PersonApp.java` to instantiate 1 `Student` and 1 `Lecturer` object. Invoke all the instance methods to check the values of the 2 objects created.

Sample Output:



```
<terminated> PersonApp [Java Application] C:\Program Files\Java\jre6\bin
Nric: 1234567A
Name: Phoon Lee Kien
Staff Id: 1234D
Total Teaching Hours: 30
Salary ($): 2700.00

Nric: 1231234B
Name: Tan Mei Mei
Admin No: 120101F
Test Mark: 30.0
Exam Mark: 100.0
Final Mark: 65.0
```

2. Amend the `Person` class in Question 1 to include a constructor that sets the `nric` and `name`. You should notice that the 2 subclasses cannot be compiled. See if you can solve this syntax error.
Hint: What are the compulsory attributes to create a student or a lecturer object?

E-Practical (2 hours)

3. Implement payroll processing for different kinds of employees:

- ❑ Hourly employees get paid an hourly rate, but if they work more than 160 hours per month, the excess is paid at “one and a half”.
- ❑ **Salaried employees** get paid their monthly salary, no matter how many hours they work.
- ❑ **Managers** are salaried employees who get paid a salary and an annual bonus.
- ❑ The program should compute and display the monthly salary for a collection of employees.

-- End --