Exercises – Classes 2:

Question 2 is the assessed question in this set.

1. Use the class **Employee** in the file **employee_module.py** and the **employeeprog.py** program. Modify the **Employee** class by adding a property getter and setter for a new attribute: **jobTitle** which contains the job title for the employee. Use the setter (mutator) to enforce the invariant that **jobTitle** must be at least 5 characters long and may not contain digits. Test the **Employee** class by compiling and running the **employeeprog.py** program.

Assessed question

5. Use the class **Employee** and the **employeeprog.py** program from question 1. Extend the **Employee** class by adding new methods **hire()**, **fire()**, and **isHired()** so that it is possible to hire and fire the employee. At times when the employee is fired, his/her salary should be fixed at zero (i.e. it should not be possible to promote, demote or raise the salary of someone who is unemployed). **isHired()** should indicate whether an employee is currently hired or not, you will need to add an extra attribute, **isHired**, to the class. You must use a property getter and setter to manage **isHired.** Extend the **employeeprog.py** program appropriately to test the new methods.

These problems are adapted from a course at UCL in the Department of Information Studies, [Programming 1](#).

Further practice problems can be found in [Think Like a Computer Scientist](#) or in any Python textbook.