**Module 1: Basic Data Structure**

Exercise 1: Object-oriented

Suppose a class, Staff, consists of 4 private attributes:

* name
* staff number
* faculty or division
* age

In addition, the class should also contain public *mutator* and *accessor* methods to control the value of each attribute. A function, which is called displayStaff, will display all attributes of the corresponding staff. A constructor that sets name, staff number, faculty or division, and age based on given values should be also defined in Staff class.

1. **Draw UML class diagram** for Staff class.
2. **Write** Staff class using programming language of your preference.
3. **Write and execute** a program that performs the followings:
   1. **Create objects** of class Staff based on the following information:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Staff number** | **Faculty/Division** | **Age** |
| Min Ho | 143 | Medicine | 30 |
| Ji Woo | 437 | Agriculture | 42 |
| Fattah | 321 | Aeronautic | 26 |

* 1. **Display** the information of each surah object by calling displayStaff function