

Consider the scenario illustrated below:

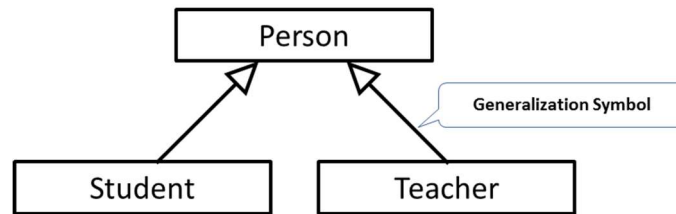


Figure: IsA Relationship

Now, write JAVA codes to perform the following tasks:

1. Implement the class **Person** which should contain following members:

MEMBERS	DESCRIPTION
<i>name</i>	string
<i>email</i>	string
<i>Person()</i>	Default Constructor
<i>void showPerson()</i>	Should print a <i>personobject</i> in following format: Printing Person----- Name: James Bond Email: example@aiub.edu -----

2. Implement the class **Student** which should contain following members:

MEMBERS	DESCRIPTION
<i>studentId</i>	string
<i>admissionDate</i>	string
<i>Student()</i>	Default Constructor
<i>void setStudent(studentId, admissionDate, name, email)</i>	Sets the attributes of a <i>student</i>
<i>void showStudent()</i>	Should print a <i>student object</i> in following format: Printing Student----- ID: 00-00000-0 Admission Date: 13/01/2015 Name: James Bond Email: bond@aiub.edu -----

3. Implement the class **Teacher** which should contain following members:

MEMBERS	DESCRIPTION
<i>employeeId</i>	string
<i>joiningDate</i>	string
<i>Teacher ()</i>	Default Constructor
<i>void setTeacher(employeeId, joiningDate, name, email)</i>	Sets the attributes of a <i>teacher</i>
<i>void showTeacher()</i>	Should print a <i>teacher object</i> in following format: Printing Teacher----- ID: 0000-0000-0 Joining Date: 13/01/2015 Name: Karl Ei Email: karl@aiub.edu -----

4. Maintain proper **Encapsulation** for all the classes mentioned above.
5. Add a main function to the program, declare some objects of **Student** & **Teacher** class and test all the methods of those objects.