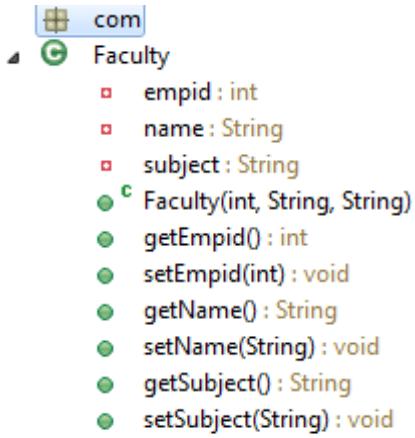
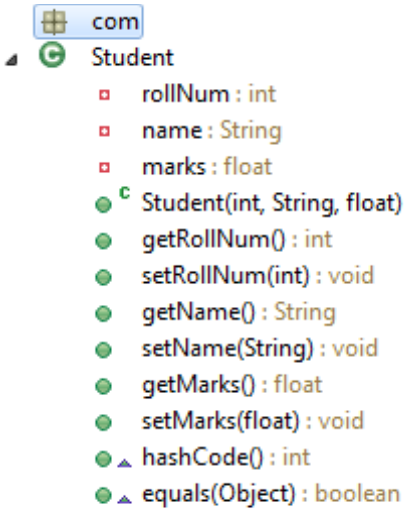
Create a class Faculty (along with the attributes and methods) as shown in the below outline:

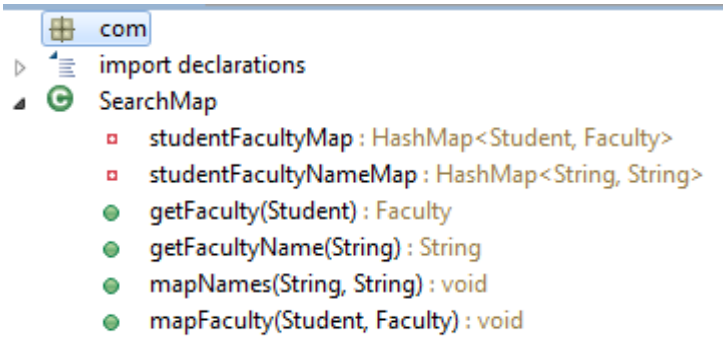


Note: The constructor Faculty takes empid, name and subject respectively as input parameters.

Create a class Student (along with the attributes and methods) as shown in the below outline:



Create a class SearchMap as shown in the below outline. The methods are described in the section following the outline.



`studentFacultyMap:` HashMap holding the Student and Faculty objects as key value pairs

`studentFacultyNameMap:` HashMap holding the names of the student and name of the faculty as key value pairs.

`mapNames:` This method takes the name of the Student and name of the faculty respectively as input parameters and adds them to the HashMap *studentFacultyNameMap* (name of the student is key and name of the faculty is the value).

`mapFaculty:` This method takes an object of Student and object of Faculty as input and adds them to the HashMap *studentFacultyMap* (where Student object is key and Faculty object is value).

`getFacultyName:` This method takes the name of the student as input and returns the corresponding name of the faculty that is mapped with the Student. If name of the student is not found in the HashMap then the method returns null.

`getFaculty:` This method takes an object of Student as input and returns the corresponding Faculty object that is mapped with this Student. If the student object is not found in the HashMap then the method returns null.