

1. We want to create a class called **Student**, which represents the students of a university. A student is defined with the following attributes: id number (**int**), first name (**string**), last name (**string**), date of birth (**Date**), address (string), and telephone (area code (**int**) and a telephone number(**string**)). The member functions of the class **Student** must perform the following operations:

- Return the id number.
- Return the first name of the student.
- Modify the first name of the student.
- Return the last name of the student
- Modify the last name of the student
- Return the full name, i.e., first name and last name.
- Return the date of birth.
- Modify the date of birth.
- Return the age of the student.
- Return the address of the student.
- Modify the address of the student.
- Return the telephone number.
- Modify the telephone number.

Test your class by prompting the user to enter information about two particular students. Create two objects of the class **Student** with the information entered by the user, and finally, and test the member functions of the class.

2. We want to create a class called **Course**, which represents the course offered at ECE. A course is defined with the following attributes: code (**string**), name (**string**), description (**string**), and a list of students registered in the course (array of type Student from previous question). You can assume that a course cannot have more than 20 registered students. The member functions of the class **Course** must perform the following operations:

- Return the course code
- Return the course name
- Modify the course name
- Return the course description
- Modify the course description
- Add a student to the course
- Remove a student from a course
- Search if a student with a certain id number is registered in the course
- Output list of student
- Output the number of registered students