

# I

Create a new C # project with three classes plus another class to test the logic in your code. The main classes of the program are the following classes:

- Person
- Student
- Professor

The Student and Teacher classes inherit from the Person class.

The Student class will include a public `Study()` method that will write `I'm studying` on the screen.

The Person class must have two public methods `Greet()` and `SetAge(int age)` that will assign the age of the person.

The Teacher class will include a public `Explain()` method that will write `I'm explaining` on the screen.

Also create a public method `ShowAge()` in the Student class that writes `My age is: x years old` on the screen.

You must create another test class called `StudentProfessorTest` with a `Main` method to do the following:

- Create a new Person and make him say hello
- Create a new Student, set an age, say hello, and display her age on the screen.
- Create a new Teacher, set an age, say hello and start the explanation.

## II

Create a C# program to manage a photo book using object-oriented programming.

To start, create a class called `PhotoBook` with a private attribute `numPages` of type `int`. It must also have a public method `GetNumberPages` that will return the number of photo book pages.

The default constructor will create an album with 16 pages. There will be an additional constructor, with which we can specify the number of pages we want in the album.

There is also a `BigPhotoBook` class whose constructor will create an album with 64 pages.

Finally create a `PhotoBookTest` class to perform the following actions:

- Create a default photo book and show the number of pages
- Create a photo book with 24 pages and show the number of pages
- Create a large photo book and show the number of pages