

# Class Lab

Create a new project named `class_lab` with a new class named `ClassLab`. When you create this class, do **not** use a main.

Make sure you use comments and correct java conventions.

- Copy the file `ClassLabClient.java` into your `class_lab` project folder that contains the `ClassLab` Class.
  - The `ClassLabClient` file will have a lot of red errors and warnings. This lab will go over and fix all the warnings so the program runs correctly.
1. In `ClassLab.java`, create 3 private variables. A `String` that stores a name; an integer that stores an age; a `String` that stores a profession. When you initialize these variables, you don't set them to any values.
  2. In `ClassLab.java`, create a constructor without any parameters. Set each of the private field variables to a "default" value (i.e.: `name = "xxx";`).
  3. In `ClassLab.java`, create a constructor that has 3 parameters (each parameter representing a private field variable). Set each private field variable to the parameter being passed in (i.e.: `this.name = name;`).
  4. Create an accessor method for each field variable. An accessor method is one that returns the value of the private field variable. The names of these accessor methods are: `getName()`, `getAge()`, `getProfession()`. They return the data type of the variable.
  5. Write a mutator method that will set the name. The method will be called `setName`, returns a void and has a `String` parameter. Use "this" to set the private variable 'name'.
  6. Write a `toString()` method. You return a `String` that is formatted in a way you want the name, profession and age printed to the screen.
  7. Write a method `ageDifference` that will return an integer and has a `ClassLab` object as a parameter. Return the difference (subtract) between this age and the parameter age.
  8. Create a static `String` field variable named 'relation'. Make this field variable public.
  9. Write a static method named `getRelation` that returns the static relation variable. Notice how it is accessed in the client code