Exercise

## Exercise: Person, version 1 (Video solutions: Person and PersonTest)

Create a new Module in IntelliJ and name it Person v1.

Add a new class called Person representing a person with a name (type String), age (type int) and gender (type char)

- a) Add a three-argument constructor with parameters for all instance variables.
- b) Add a two-argument constructor with name and gender as parameters. Initialize the age to zero.
- c) Add a one-argument constructor with gender as the only parameters. Initialize the name to null and age to zero.
- d) Add getters for all instance variables.
- e) Add setters for all instance variables.

- Person
- name : String - age : int gender : char
- + Person(name : String, age : int, gender : char)
- + Person(name : String, gender : char)
- + Person(gender : char)
- + getName(): String
- + getAge():int
- + getGender(): char
- + setName(name : String) : void
- + setAge(age : int) : void
- + setGender(gender : char) : void
- + toString(): String

f) Add a method toString returning a string with the values for name, age and gender (in the same string)

Implement a test class with a main method for your class Person (name the class PersonTest). Do at least the following:

- 1. Read name, age and gender from keyboard and create a Person object using the three-argument constructor.
  - o Note1: You cannot read a char from keyboard, instead read a string and get the first character the following way:

```
String line = keyboard.nextLine();
char gender = line.charAt(0);
```

- o Note2: If the application is not waiting for you to type in a string (for the line/gender) after reading the int (for age) then consult Code Listing 2-31 (code line 27 and the comments after the code listing) - p. 118-119
- 2. Print out name, age and gender of the Person object using the getters.
- 3. Print out the person using toString.
- 4. Change the name using setName and printout again, either using getName or toString.
- 5. Change the age using setAge and printout again, either using getAge or toString.
- 6. Change the address using setGender and printout again, either using getgender or toString.
- 7. Create two more persons using each of the other constructors either from keyboard input or hardcoded values (literals)
- 8. Go through step 3-6 for both of the persons.

Is the output as expected?