# CSE 110 - Lab 7

**This lab is for practicing the object oriented programming, and you need to implement a Student Class and implement a simple system to modify and view user information.**
**Use the following Coding Guidelines:**

• When declaring a variable, you usually want to initialize it.

• Use white space to make your program more readable.

• Use comments after the ending brace of classes, methods, and blocks to identify to which block it belongs.

**Assignments Documentation:**

At the beginning of each programming assignment you must have a comment block with the following information:

```
/*----------------------------------------------------------------------------
// AUTHOR:            (Put your name here)
// FILENAME:          Lab7.java
// SPECIFICATION:     This program is for practicing the object oriented programming.
// You need to develop the setName() method of Student Class and construct a simple system
// that can manage a student's name and age
// LAB LETTER:    (Put your Lab Letter here)
//----------------------------------------------------------------------------*/
```

**Getting Started**

This lab is different from the previous ones. You are asked to use two Java files. First make **Student** class. The following is a template to make a class.

```
public class Student {

   private String name;
   ...

   public Student(String name, ...) {
     this.name = name;
     ...
   }
   public void setName(...) {
     ...
   }
   public void setAge(...) {
     ...
   }
   public void tostring() {
     System.out.println("Name is: " ... );
   }
   public String getName() {
       ...
   }
   public int getAge() {
     ...
   }
}
```

Second, create a class called **Lab7**. Use the same setup for setting up your class and main method as you did for the previous assignments. Be sure to name your file **Lab7.java**.

**Hints**

Please replace //--> with the correct program to finish the task according to the corresponding comment.
Please replace ??? with the correct program to enable the program to run as required.

```
//import anything you need
//-->

//declare the class Lab7
//-->

      //declare the main method
      //-->

 //Declare a scanner
 //-->

 // Declare a String username and an integer age for 2 different student objects
  //-->

 // Ask user to input a username for student 1
 //-->

 //Scan the input to username for student 1

 //-->


 // Ask user to input an age for student 1

 //-->>

 //read the integer to age for student 1

 String temp = scan.nextLine();
 age = Integer.parseInt(temp);

 // Repeat the above for Student 2

 // Instantiate 2 Student objects using its constructor method
 //-->

 // Declare Constant integers Print = 0, Modify_Username = 1, Modify_Age = 2, Quit = 3

  // Create an integer variable named choice.
  //-->


  // Create a do-while loop that exits only when the user chooses quit (choice = QUIT)
  // Have the do-statement here
  ??
  {
  // Print the following options:
  // "This proram does the following:"
```

```
    //-->

    // "0. Print information:"
    //-->
    // "1. Modify username:"
    //-->
    // "2. Modify age:"
    //-->
    // "3. Quit"
    //-->
    // Read the value the user enters and store it in an integer variable <choice>
      temp = scan.nextLine();
      choice = Integer.parseInt(temp);

    // Create a switch statement with <choice> as input for the 3 cases
      switch(???)
      {
      case ???:
        //print the String returned by toString() method of Student for student 1
        //-->
        //print the String returned by toString() method of Student for student 2
        //-->

        //After each case, don't forget to terminate it using break
        //-->
      case ???:
        //define a String variable <newName>
        //-->
        //Print “Enter the student number that you wish to midify: (1/2)?”
        //-->
        //scan the input integer and assign it to <stu_num> (based on this input you will modify the particular
student’s info)
        //-- >

        // Print "Please input the new name:"
        //-->
        //scan the String and assign it to <newName>
        //-->
        //call setName() method of student to replace the name with new input name
        //-->
      case mAge:
//Print “Enter the student number that you wish to midify: (1/2)?”
        //-->
        //scan the input integer and assign it to <stu_num> (based on this input you will modify the particular
student’s info)
        // -- >
        //define an int variable <newAge>
        //-->
        // Print "Please input the new age:"
        //-->
        //scan the next integer and assign it to <newAge>
        //-->
        //call setAge() method of student to replace the name with new input name
        //-->
      case QUIT:
        // Print "You choose to quit"
```

```
      //-->
    default:
      // Print "Please choose again"
      //-->
    }
  }???
 }
}
```

Sample output:

```
Please input a username for student 1
wuliang
Please input an age for student 1
18
Please input a username for student 2
Lee
Please input an age for student 2
21

This program does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
0
Name is   :wuliang
Age is          :18
Name is   :Lee
Age is          :21
This program does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
1
Enter the student number that you wish to midify: (1/2)?: 1
Please input the new name:yoshi
This proram does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
0
Name is   :yoshi
Age is          :18
Name is   :Lee
Age is          :21

This proram does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
2
Enter the student number that you wish to midify: (1/2)?: 2
```

```
Please input the new age:22
This proram does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
0
Name is    :yoshi
Age is             :18
Name is    :Lee
Age is             :22

This proram does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
5
Please choose again
This proram does the following:
0. Print information:
1. Modify username:
2. Modify age:
3. Quit
3
You choose to quit
```