

Advanced Topics in Programming 2019

Lab1

Part 1

1. Create a new Java project.
2. Add an *enum* called *StudentType* that contain BSC, MSC and PHD.
3. Add a new class called *Student* that contain:
 - a. `String firstName`
 - b. `String lastName`
 - c. `enum StudentType { BSC, MSC, PHD }`
 - d. Methods:
 - i. Add a method called *PrintStudent()* that prints the students details to console.

```
System.out.println("");
```
4. Create a Main class.
5. Inside the Main class:
 - a. Create new method called *Lab1()* and invoke it from the *Main()* method.
 - b. Inside the *Lab1()* method:
 - i. Create new Students with different details and invoke their *PrintStudent()* method.
6. Execute your program and test it.
7. Debug you program step by step.

Part 2 - advanced

1. Create a console user interface (not an Interface class) which repeatedly asks the user to insert a new student.
 - a. In each iteration ask the user if he wants to enter new student (y/n)?
 - b. If the student enters “y”, ask the user to enter all the students required fields.
 - i. Read the user’s info and create a new *Student* object with the details you received from the user. You don’t have to validate the entered data in this exercise.

```
Scanner reader = new Scanner(System.in);  
String a = reader.next();
```
 - ii. Add the new *Student* object to an array.

- c. If the user select enters “n”: print all the students. Use the *PrintStudent()* method you have created to go over the array and print all of the new students in the array.