# 03. SoftUni’s student



## Preparation

Download the skeleton provided in Judge. **Do not** change the **packages**!

**Pay attention to name the package shelter, all the classes, their fields, and methods the same way they are presented in the following document. It is also important to keep the project structure as described.**

**Problem Description**

Your task is to create a repository which stores departments by creating the classes described below.

### Student

First, write a Java class Student with the following fields:

* **firstName: String**
* **lastName: String**
* **bestCourse: String**

The class **constructor** should receive а **firstName, lastName** and **bestCourse**. You need to create the appropriate **getters and setters**. The class should override the **toString()** method in the following format:

**"Student: {firstName} {lastName}, Best Course = {bestCourse}"**

### SoftUni

**Next**, write a **Java** class SoftUni that has **students** (a collection, which stores the entity **Student**). All entities inside the repository have the **same fields**. Also, the SoftUni class should have those fields:

* **capacity:** int
* **data:** List<Student> **-** holds all added students in the hall

The class **constructor** should receive **capacity**, also it should initialize the **students** with a new instance of the collection**.**

Implement the following features:

* getCapacity()
* getCount() method – **returns** the **number** of **students in the course.**
* insert(Student student) method – **adds** an **entity** to the data **if** **there** **is** a **hall** for it.
  + Returns **"Added student {firstName} {lastName}."** – if the student is **successfully added.**
  + Returns **"Student is already in the hall."** – if the student is already in the hall.
  + Returns **"The hall is full."** -if the hall is full.
* remove(Student student) method – **removes the student**
  + Returns **"Removed student {firstName} {lastName}."** – if the student is **successfully removed.**
  + Returns **"Student not found."** if the student is not in the hall.
* **getStudent(String firstName, String lastName)** method - returns the student with the **given names**.
* **getStatistics()** – **returns** a **String** in the following **format**:
  + **"Hall size: {addedStudentsCount}  
     Student: {firstName} {lastName}, Best Course = {bestCourse}   
     Student: {firstName} {lastName}, Best Couse = {bestCourse}  
     (…)**"

## Constraints

* The **combinations** of **names** will **always be unique**.
* The **capacity** will always be **a positive** **number**.

## Examples

This is an example how the **SoftUni** class is **intended to be used**.

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| Sample code usage |
| // Initialize the repository SoftUni softUni = new SoftUni(7);  // Initialize entitiesStudent student = new Student("Boryana", "Dimitrova", "JavaScript");  Student studentTwo = new Student("Joana", "Jonkova", "Java");  Student studentThree = new Student("Desislava", "Topuzakova", "FundamentalsInMathematics");  Student studentFour = new Student("Alex", "Raykova", "Python");  Student studentFive = new Student("Rosica", "Nenova", "C#");  // Register StudentString adding = softUni.insert(student);  System.*out*.println(adding); // Added student Boryana Dimitrova. String adding1 = softUni.insert(studentTwo);  System.*out*.println(adding1); // Added student Joana Jonkova.softUni.insert(studentThree);  softUni.insert(studentFour);  // Remove StudentString removal = softUni.remove(studentTwo);  System.*out*.println(removal); // Removed student Joana Jonkova.String removal1 = softUni.remove(studentFive);  System.*out*.println(removal1); // Student not found.  // Get StudentSystem.*out*.println(softUni.getStudent("Alex", "Raykova")); // Student: Alex Raykova, Best Course – Python  // Get Statistics  System.*out*.println(softUni.getStatistics()); //Hall size: 3 //Student: Boryana Dimitrova, Best Course = JavaScript //Student: Desislava Topuzakova, Best Course = FundamentalsInMathematics //Student: Alex Raykova, Best Course = Python |

## Submission

Zip all the files in the project folder except the **bin** and **obj** folders.

Submit a **single .zip file**, containing **softUni package, with the classes inside (Student, SoftUni, and the Main class)**, there is no specific content required inside the Main class e. g. you can do any kind of local testing of your program there. However, there should be a **main(String[] args)** method inside.