TP1: Intro Spring Boot + Spring Data JPA

Ex1: Implement class student with some attributes like :
Id, First name, last name, age, email

Then, create a Repository for Student to manipulate data between class and database.
Add some method like findAll(), findById(Integer Id), findByFirstNameAndLastName(String firstName, String lastName)

Ex2: Implement some endpoints (APIs) in order to :

- Get all students from database
- Get a student by email
- Get all students by first name
- Get all students are older than 20. (age >20)
- Save a new student (given @RequestBody Student student)
- Modify the email of a student (by passing his id and the new email)
- Modify the last name of a student (by passing his email and the new last name)
- Modify the age of all students : incrementing by 1 (for ex age = 25 -> 25+1)
- Delete a student (given @RequestBody Student student)

Ex 3: Implement class Book with some attributes like :
Id, Code, Name

Then add mapping relationship between class Student and Course :
Book

```
@JsonBackReference
@ManyToOne()
@JoinColumn(name = "student_id")
@EqualsAndHashCode.Exclude
@ToString.Exclude
private Student student;
```

Student

```
@JsonManagedReference
@OneToMany(mappedBy = "student", cascade = CascadeType.ALL, fetch =
FetchType.EAGER)
@EqualsAndHashCode.Exclude
@ToString.Exclude
private List<Book> books;
```

Ex 4: Implement the repository for class Book, then create some APIs:

- Get all books
- Get a book by code
- Save a new book (given @RequestBody Book book)
- Given a student and a new list book, modify the list book of this student by replacing the new list book

Don’t forget testing your APIs and enjoy ;)