



CSE434 - Aspect & Service Oriented Programming

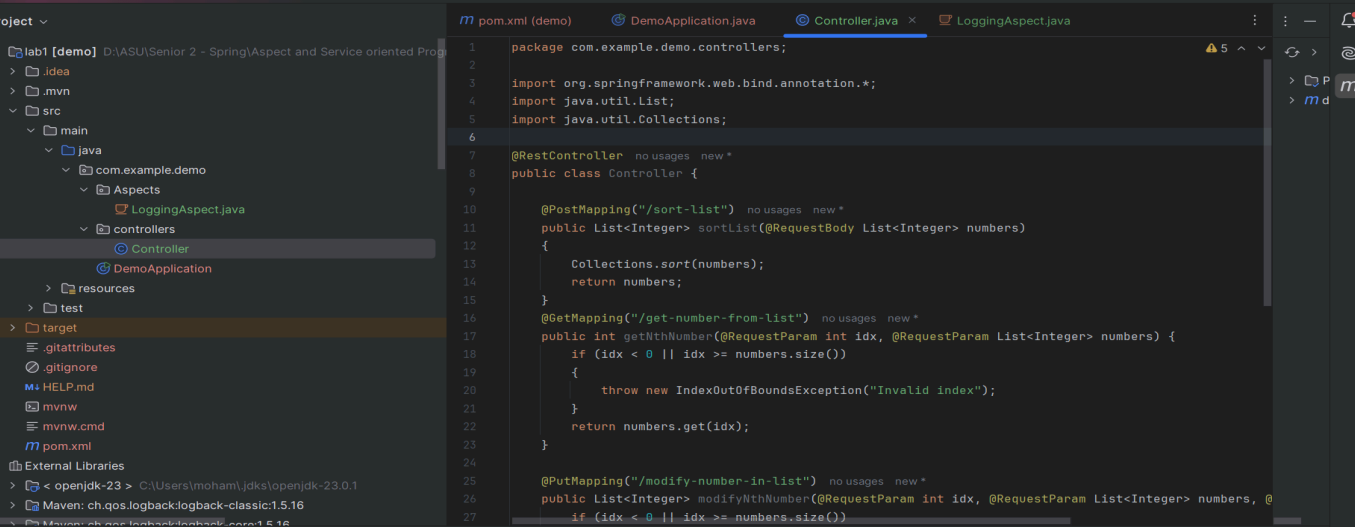
CESS

Spring 2025

Lab 1

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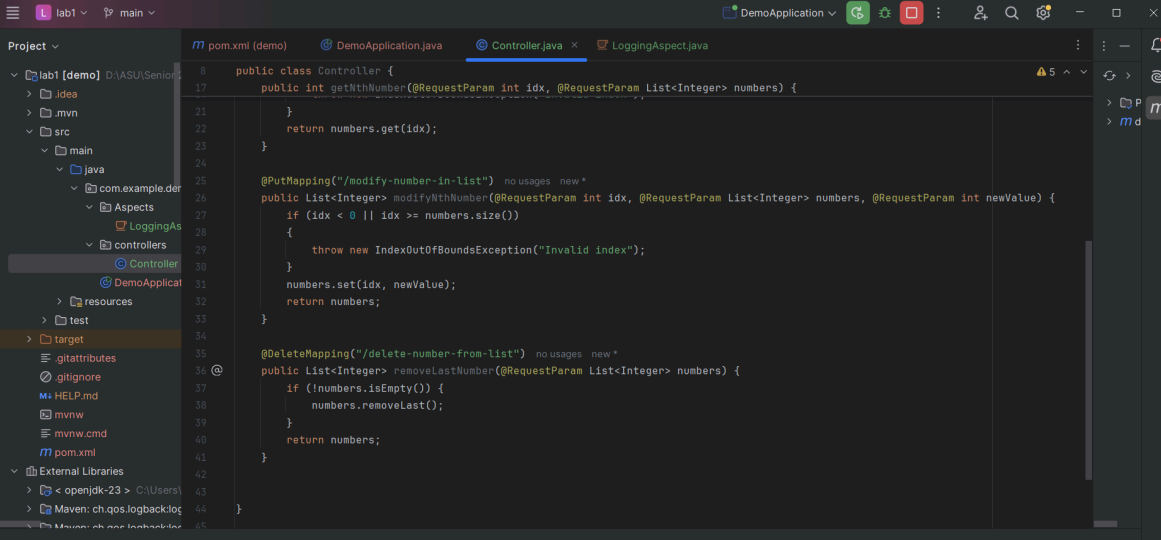
1. Code Screenshots:



This screenshot shows the IntelliJ IDEA IDE with the `Controller.java` file open. The file is located in the package `com.example.demo.controllers`. It contains the following code:

```
1 package com.example.demo.controllers;
2
3 import org.springframework.web.bind.annotation.*;
4 import java.util.List;
5 import java.util.Collections;
6
7 @RestController
8 public class Controller {
9
10     @PostMapping("/sort-list")
11     public List<Integer> sortList(@RequestBody List<Integer> numbers)
12     {
13         Collections.sort(numbers);
14         return numbers;
15     }
16
17     @GetMapping("/get-number-from-list")
18     public int getNthNumber(@RequestParam int idx, @RequestParam List<Integer> numbers) {
19         if (idx < 0 || idx >= numbers.size())
20         {
21             throw new IndexOutOfBoundsException("Invalid index");
22         }
23         return numbers.get(idx);
24     }
25
26     @PutMapping("/modify-number-in-list")
27     public List<Integer> modifyNthNumber(@RequestParam int idx, @RequestParam List<Integer> numbers, @
```

The IDE interface shows the project structure on the left, with the `Controller` class selected. The bottom panel displays the 'Problems' tab, showing two warnings: 'Class 'Controller' is never used' and 'Method 'sortList(java.util.List<java.lang.Integer>)' is never used'.

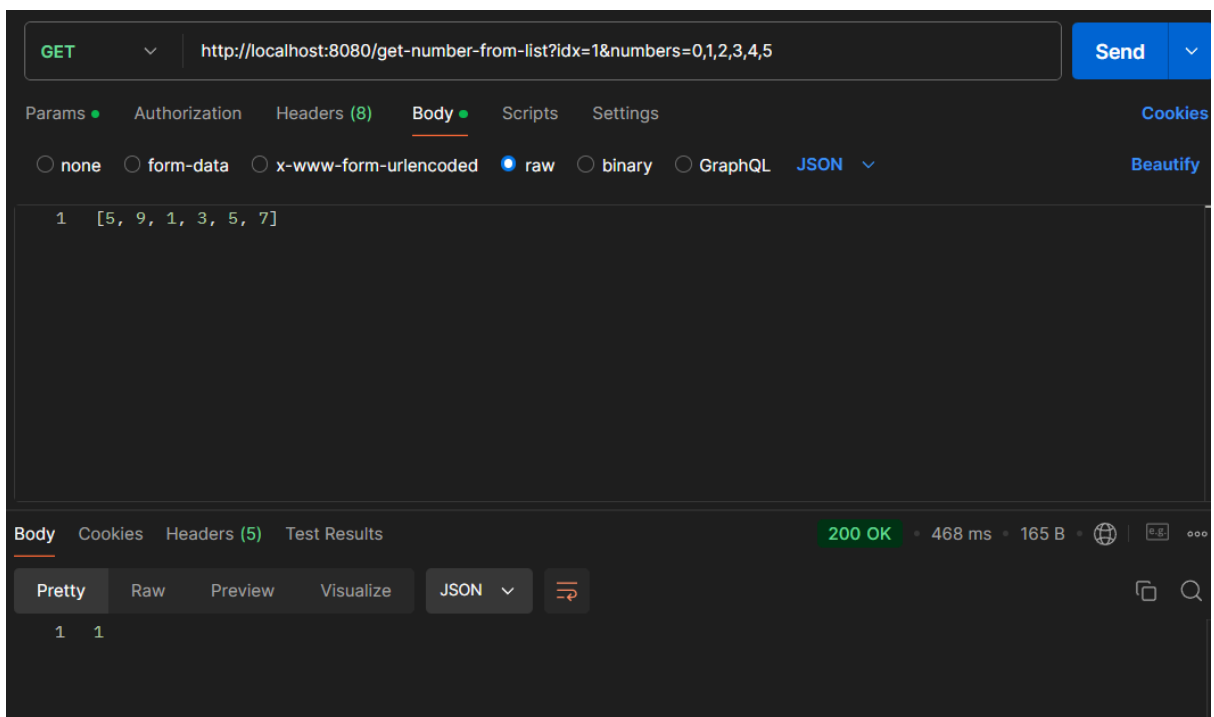
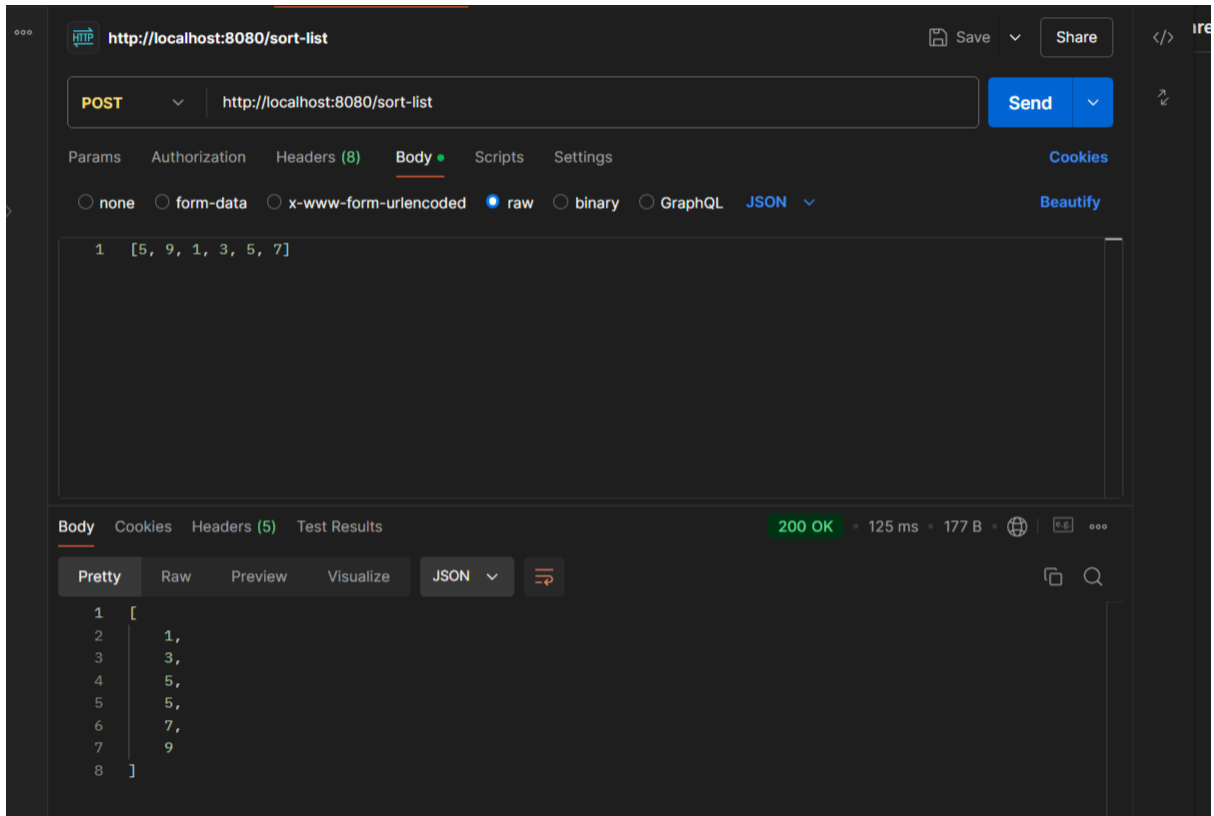


This screenshot shows the IntelliJ IDEA IDE with the `Controller.java` file open, displaying the continuation of the code from the previous screenshot:

```
28     {
29         throw new IndexOutOfBoundsException("Invalid index");
30     }
31     numbers.set(idx, newValue);
32     return numbers;
33 }
34
35 @DeleteMapping("/delete-number-from-list")
36 public List<Integer> removeLastNumber(@RequestParam List<Integer> numbers) {
37     if (!numbers.isEmpty())
38     {
39         numbers.removeLast();
40     }
41     return numbers;
42 }
43
44 }
```

The IDE interface shows the project structure on the left, with the `Controller` class selected. The bottom panel displays the 'Problems' tab, showing two warnings: 'Class 'Controller' is never used' and 'Method 'sortList(java.util.List<java.lang.Integer>)' is never used'.

2. PostMan Screenshots:



PUT

http://localhost:8080/modify-number-in-list?idx=4&numbers=0,1,2,3,4,5&newValue=200

Send

Params Authorization Headers (8) **Body** Scripts Settings Cookies

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

Beautify

1

[5, 9, 1, 3, 5, 7]

Body

Cookies

Headers (5)

Test Results

200 OK

29 ms

179 B

Pretty

Raw

Preview

Visualize

JSON

1

[

2

0,

3

1,

4

2,

5

3,

6

200,

7

5

8

]

DELETE

http://localhost:8080/delete-number-from-list?numbers=0,1,2,3,4,5

Send

Params Authorization Headers (8) **Body** Scripts Settings Cookies

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

Beautify

1

[5, 9, 1, 3, 5, 7]

Body

Cookies

Headers (5)

Test Results

200 OK

16 ms

175 B

Pretty

Raw

Preview

Visualize

JSON

1

[

2

0,

3

1,

4

2,

5

3,

6

4

7

]

Github repo link:

<https://github.com/MohamedMaghrabyyy/Aspect-and-Service-Oriented-Programming-Labs>