


# RestController

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⚙️ SpringBoot	

Entity.Student

```
package com.Course.Practice.entity;

public class Student {
    private int id;
    private String name;
    private String dept;

    public Student(int id, String name, String dept) {
        this.id = id;
        this.name = name;
        this.dept = dept;
    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
```

```

        this.name = name;
    }

    public String getDept() {
        return dept;
    }

    public void setDept(String dept) {
        this.dept = dept;
    }

    @Override
    public String toString() {
        return "Student{" +
            "id=" + id +
            ", name='" + name + '\'' +
            ", dept='" + dept + '\'' +
            '}';
    }
}

```

## Controller.MyController

```

package com.Course.Practice.controller;

import com.Course.Practice.entity.Student;
import com.Course.Practice.service.StudentService;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;

import java.util.List;

```

```

@RestController
public class MyController {

    @Autowired
    private StudentService service;

    @GetMapping("/HOME")
    public String home() {
        return "this is the home";
    }

    @GetMapping("/students")
    public List<Student> getStudents() {
        return this.service.getStudent();
    }

    @GetMapping("/students/{id}")
    public Student getStudent(@PathVariable String id){
        return this.service.getStudent(Integer.parseInt(id));
    }

    @PostMapping("/addStudent")
    public Student addStudent(@RequestBody Student student){
        return this.service.setStudent(student);
    }

    @DeleteMapping("/removeStudent/{id} ")
    public List<Student> removeStudent(@PathVariable String id){
        return this.service.removeStudent(Integer.parseInt(id));
    }
}

```

### Service.StudentService.java

```
package com.Course.Practice.service;

import com.Course.Practice.entity.Student;

import java.util.List;

public interface StudentService {
    public List<Student> getStudent();
    public Student getStudent(int id);
    public Student setStudent(Student student);
    public List<Student> removeStudent(int id);
}
```

### service.StudentServiceImpl.java

```
package com.Course.Practice.service;

import com.Course.Practice.entity.Student;
import org.springframework.stereotype.Service;

import java.util.ArrayList;
import java.util.List;

@Service
public class StudentServiceImpl implements StudentService{

    List<Student> students;

    public StudentServiceImpl(){
        students=new ArrayList<>();
        students.add(new Student(1,"Deepak","Civil"));
    }
}
```

```

        students.add(new Student(2, "john", "Mech"));
        students.add(new Student(3, "Will", "cs"));
    }
    public List<Student> getStudent() {
        return students;
    }

    @Override
    public Student getStudent(int id) {
        Student s=null;
        for (Student student:students) {
            if(student.getId()==id){
                s=student;
                break;
            }
        }
        return s;
    }

    @Override
    public Student setStudent(Student student) {
        students.add(student);
        return student;
    }

    @Override
    public List<Student> removeStudent(int id) {
        for (Student student:students
            ) {
            if(student.getId()==id){
                students.remove(student);
                break;
            }
        }

        return students;
    }

```

```
}  
}
```