

# Sample REST Demo application

## Step-04

### Main Method

```
package com.suji.sample;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class SampleDemoFirstApplication {

    public static void main(String[] args) {
        SpringApplication.run(SampleDemoFirstApplication.class, args);
    }
}
```

---

### Simple Interest Controller

```
package com.suji.sample.controller;

import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;

import com.suji.sample.model.SimpleInterestRequest;
import com.suji.sample.model.SimpleInterestResponse;

@RestController
@RequestMapping("/simple")
public class SimpleInterestController {

    @PostMapping("/interest")
    public SimpleInterestResponse getInterest(@RequestBody SimpleInterestRequest sir)
    {

        int interest = sir.getPrincipal() * sir.getTime() * sir.getRate() /100;
        int total = interest + sir.getPrincipal();

        return new SimpleInterestResponse(interest, total);
    }
}
```

---

### SimpleInterestRequest

```
public class SimpleInterestRequest {

    private int principal;
    private int time;
    private int rate;

    public SimpleInterestRequest() {
    }

    public SimpleInterestRequest(int principal, int time, int rate) {
        this.principal = principal;
        this.time = time;
        this.rate = rate;
    }
    // Getters and Setter
}
```

---

## Simple Interest Response

```
public class SimpleInterestResponse {

    private int interest;
    private int total;

    public SimpleInterestResponse() {
        super();
    }

    public SimpleInterestResponse(int interest, int total) {
        this.interest = interest;
        this.total = total;
    }
    // Getters and Setter
}
```

---

## application.properties

```
# Server Port
server.port=8080

# Open API Available at http://localhost:8080/api-docs/
springdoc.api-docs.path=/api-docs

# Swagger UI Available at http://localhost:8080/swagger.html
springdoc.swagger-ui.path=/swagger.html
```

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## pom.xml

```
<dependencies>

    <dependency>
        <groupId>org.springdoc</groupId>
        <artifactId>springdoc-openapi-ui</artifactId>
        <version>1.6.4</version>
    </dependency>

    <dependency>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-web</artifactId>
    </dependency>

</dependencies>
```

---

## Input

```
{
  "principal": 600000,
  "time": 12,
  "rate": 4
}
```

## Output

```
{
  "interest": 288000,
  "total": 888000
}
```