

Program 3: Restful Controller:

Create a Spring Boot Application using Maven Plugin

- Write a sample REST Controller API using Spring Annotations
- Using Postman invoke the REST Controller to demonstrate end to end working

Book.java

```
package com.example.restful_demo;

import jakarta.annotation.Nonnull;

public class Book {
    private Long id;

    public Long getId() {
        return id;
    }

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

    public String getTitle() {
        return title;
    }

    public void setTitle(String title) {
        this.title = title;
    }

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public int getPublicationYear() {
        return publicationYear;
    }

    public void setPublicationYear(int publicationYear) {
        this.publicationYear = publicationYear;
    }

    private String title;
    private String author;
    private int publicationYear;
}
```

BookController.java

```
package com.example.restful_demo;
//imports
@RestController
@RequestMapping("/api/books")
public class BookController {
    private final List<Book> books = new ArrayList<Book>();
```

```
@GetMapping
public List<Book> getAllBooks() {
    return books;
}
```

```
@PostMapping
public Book addBook(@RequestBody Book book) {
    books.add(book);
    return book;
}
}
```

main class:

```
package com.example.restful_demo;

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

@SpringBootApplication
public class RestfulDemoApplication {

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