Program no 5:

Create a Spring Boot Application using Maven Plugin

- Write a REST Controller API using Spring Annotations to validate the user input for -Product details using POST, PUT methods.
- Using Postman invoke the REST Controller to demonstrate end to end working

```
Product.java
```

package com.example.RestExample validate;

```
import jakarta.validation.constraints.Max;
import jakarta.validation.constraints.Min;
import jakarta.validation.constraints.NotBlank;
import jakarta.validation.constraints.NotNull;
public class Product {
      @NotNull(message="id is required")
      @Min(1)
      @Max(100)
  private Long id;
  @NotBlank(message = "Name is required")
  private String name;
  @Min(1)
  @NotNull(message = "Price is required")
  private Double price;
      public Long getId() {
             return id;
      public void setId(Long id) {
             this.id = id;
      public String getName() {
             return name;
      public void setName(String name) {
             this.name = name;
      public Double getPrice() {
             return price;
      public void setPrice(Double price) {
             this.price = price;
      }
}
```

ProductController.java:

```
package com.example.RestExample validate;
@RestController
@RequestMapping("/api/products")
public class ProductController {
  private final List<Product> products = new ArrayList<>();
  @PostMapping
  public ResponseEntity<?> addProduct(@Valid @RequestBody Product product,
BindingResult result) {
      List<String> displayErrors = new ArrayList<String>();
    if (result.hasErrors()) {
       List<FieldError> errors = result.getFieldErrors();
      for(FieldError err:errors) {
            displayErrors.add(err.getField() + ": " + err.getDefaultMessage());
            System.out.println(displayErrors);
      }
       return ResponseEntity.badRequest().body(displayErrors);
    products.add(product);
    return ResponseEntity. status(HttpStatus. CREATED).body(product);
  }
  @GetMapping
  public List<Product> getProduct(){
      return products;
  }
main class:
package com.example.RestExample validate;
//imports
@SpringBootApplication
public class RestExampleValidateApplication {
      public static void main(String[] args) {
            SpringApplication.run(RestExampleValidateApplication.class, args);
      }
}
-----end of the program-----
```