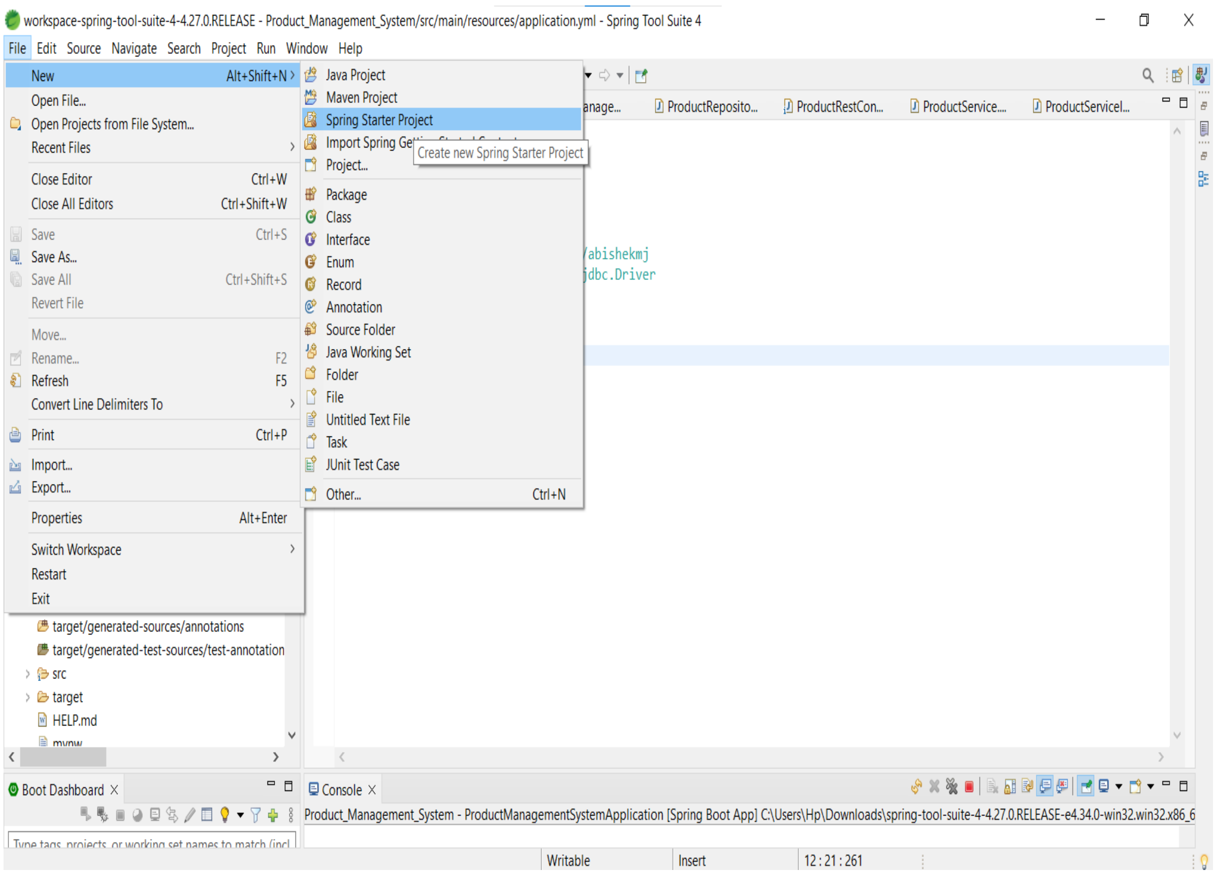
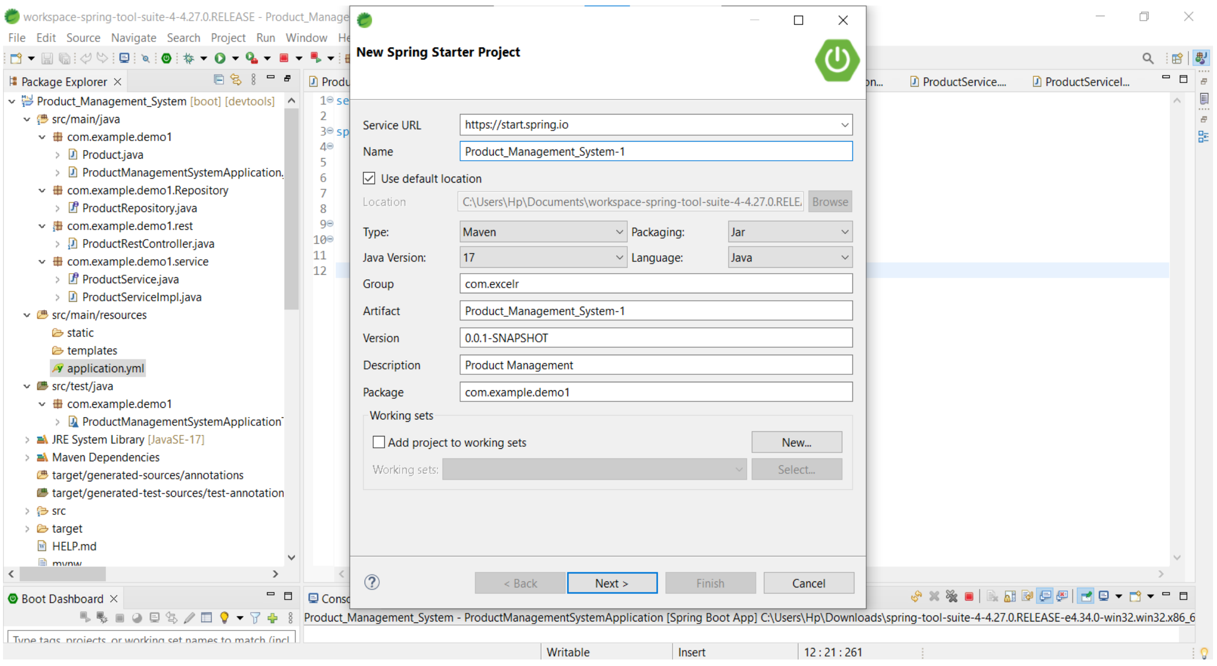
BACKEND PROJECT SNAPSHOTS

Step 1 : Creation of Project



```
Product_Management_System - ProductManagementSystemApplication [Spring Boot App] C:\Users\Hp\Downloads\spring-tool-suite-4-4.27.0.RELEASE-e4.34.0-win32.win32.x86_6
```

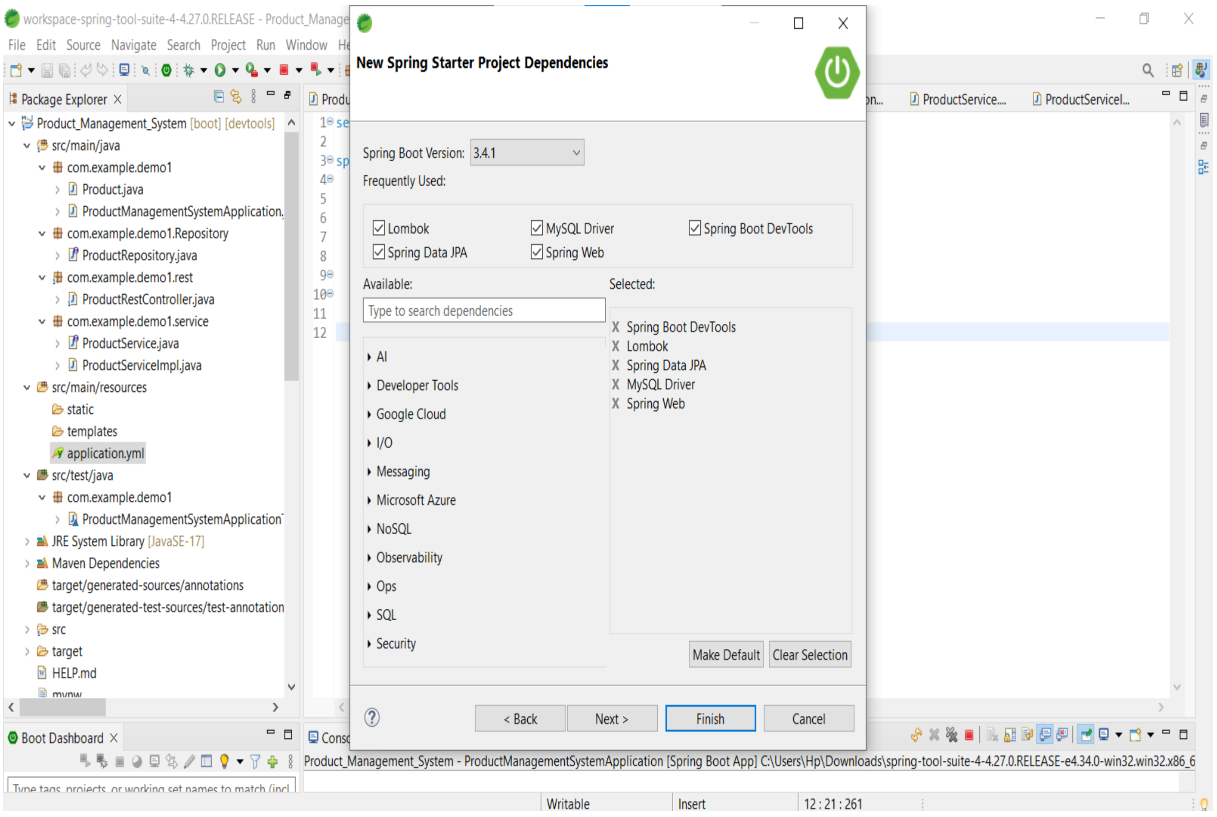

Package Explorer
Product_Management_System [boot] [devtools]
src/main/java
com.example.demo1
Product.java
ProductManagementSystemApplication.
com.example.demo1.Repository
ProductRepository.java
com.example.demo1.rest
ProductRestController.java
com.example.demo1.service
ProductService.java
ProductServiceImpl.java
src/main/resources
static
templates
application.yml
src/test/java
com.example.demo1
ProductManagementSystemApplication
JRE System Library [JavaSE-17]
Maven Dependencies
target/generated-sources/annotations
target/generated-test-sources/test-annotation
src
target
HELP.md
Boot Dashboard
< Back
Next >
Finish
Cancel

New Spring Starter Project

Service URL	https://start.spring.io
Name	Product_Management_System-1
☑ Use default location	
Location	C:\Users\Hp\Documents\workspace-spring-tool-suite-4-4.27.0.RELE
Type:	Maven
Packaging:	Jar
Java Version:	17
Language:	Java
Group	com.excelr
Artifact	Product_Management_System-1
Version	0.0.1-SNAPSHOT
Description	Product Management
Package	com.example.demo1

Working sets
☐ Add project to working sets

```
Product_Management_System - ProductManagementSystemApplication [Spring Boot App] C:\Users\Hp\Downloads\spring-tool-suite-4-4.27.0.RELEASE-e4.34.0-win32.win32.x86_6
```



New Spring Starter Project Dependencies

Spring Boot Version: 3.4.1

Frequently Used:

- [✓] Lombok
- [✓] MySQL Driver
- [✓] Spring Boot DevTools
- [✓] Spring Data JPA
- [✓] Spring Web

Available: Type to search dependencies

AI, Developer Tools, Google Cloud, I/O, Messaging, Microsoft Azure, NoSQL, Observability, Ops, SQL, Security

Selected:

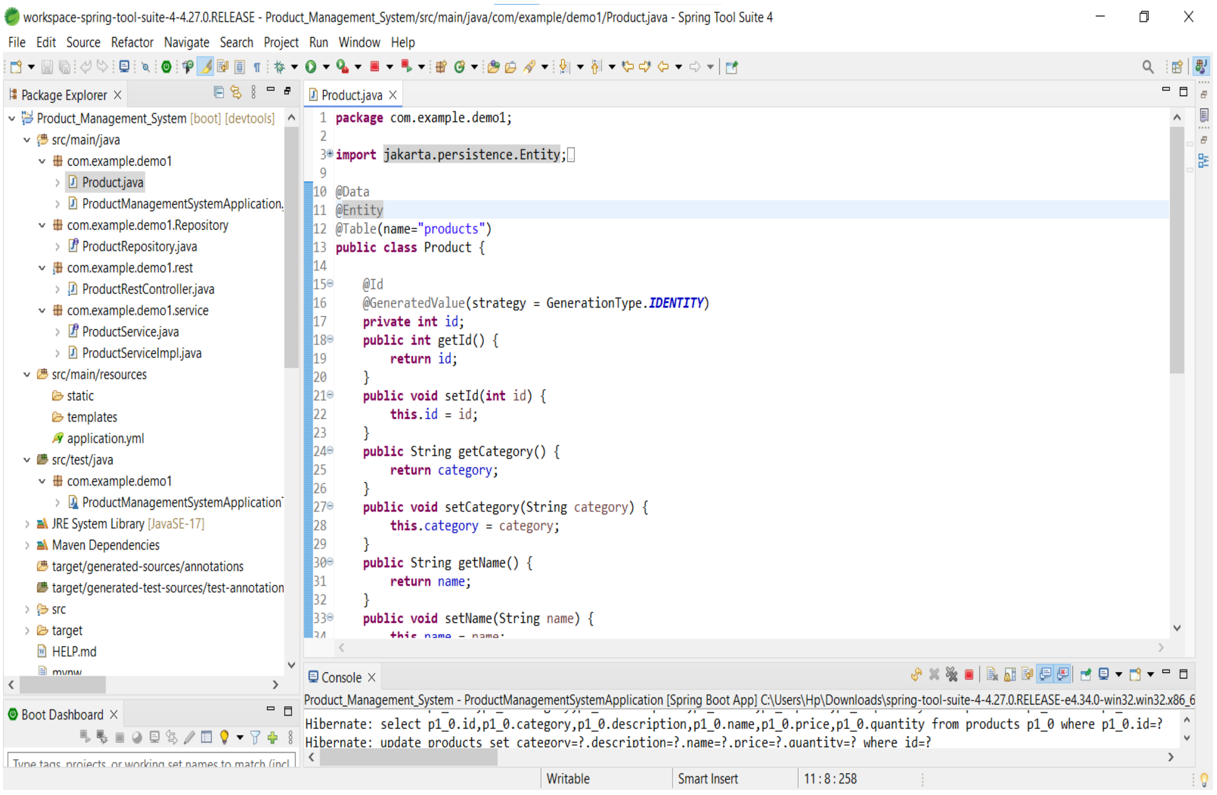
- Spring Boot DevTools
- Lombok
- Spring Data JPA
- MySQL Driver
- Spring Web

Make Default | Clear Selection

< Back | Next > | Finish | Cancel

```
Product_Management_System - ProductManagementSystemApplication [Spring Boot App] C:\Users\Hp\Downloads\spring-tool-suite-4-4.27.0.RELEASE-e4.34.0-win32.win32.x86_6
```

STEP 2 : PROJECT STRUCTURE



workspace-spring-tool-suite-4-4.27.0.RELEASE - Product_Management_System/src/main/java/com/example/demo1/Product.java - Spring Tool Suite 4

```
Product_Management_System [boot] [devtools]
  src/main/java
    com.example.demo1
      Product.java
      ProductManagementSystemApplication.
    com.example.demo1.Repository
      ProductRepository.java
    com.example.demo1.rest
      ProductRestController.java
    com.example.demo1.service
      ProductService.java
      ProductServiceImpl.java
  src/main/resources
    static
    templates
    application.yml
  src/test/java
    com.example.demo1
      ProductManagementSystemApplication
  JRE System Library [JavaSE-17]
  Maven Dependencies
  target/generated-sources/annotations
  target/generated-test-sources/test-annotation
  src
  target
  HELP.md
  mvnw
```

```java
package com.example.demo1;

import jakarta.persistence.Entity;

@Data
@Entity
@Table(name="products")
public class Product {

    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getCategory() {
        return category;
    }
    public void setCategory(String category) {
        this.category = category;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
```

```
Product_Management_System - ProductManagementSystemApplication [Spring Boot App] C:\Users\Hp\Downloads\spring-tool-suite-4-4.27.0.RELEASE-e4.34.0-win32.win32.x86_6
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: update products set category=?,description=?,name=?,price=?,quantity=? where id=?
```

Product.java

```
package com.example.demo1;
import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.GenerationType;
import jakarta.persistence.Id;
import jakarta.persistence.Table;
import lombok.Data;

@Data
@Entity
@Table(name="products")
public class Product {

@Id
@GeneratedValue(strategy = GenerationType.IDENTITY)
private int id;
public int getId() {
        return id;
}
public void setId(int id) {
        this.id = id;
}
public String getCategory() {
        return category;
}
public void setCategory(String category) {
        this.category = category;
}
public String getName() {
        return name;
}
public void setName(String name) {
        this.name = name;
}
public Integer getQuantity() {
	return quantity;
}
public void setQuantity(Integer quantity) {
	this.quantity = quantity;
}
public String getDescription() {
	return description;
}
public void setDescription(String description) {
	this.description = description;
}
public Double getPrice() {
	return price;
}
public void setPrice(Double price) {
	this.price = price;
}
private String category;
private String name;
private Integer quantity;
private String description;
private Double price;

}
}
```

Product ManagementSystemApplication.java

```
package com.example.demo1;
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
@SpringBootApplication
public class ProductManagementSystemApplication {
public static void main(String[] args) {
SpringApplication.run(ProductManagementSystemApplication.class, args);
}
}
```

ProductRepository.java

```
package com.example.demo1.Repository;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.example.demo1.Product;
@Repository
public interface ProductRepository extends JpaRepository<Product, Integer> {
}
```

ProductRestController.java

```
package com.example.demo1.rest;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.DeleteMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RestController;

import com.example.demo1.Product;
import com.example.demo1.service.ProductService;

@RestController
public class ProductRestController {

    @Autowired
    private ProductService productService;

    // Create a new product
```

```
@PostMapping("/createProduct")
public ResponseEntity<String> createProduct(@RequestBody Product product) {
    String status = productService.upsert(product);
    return new ResponseEntity<>(status, HttpStatus.CREATED);
}

// Get a product by ID
@GetMapping("/getProduct/{id}")
public ResponseEntity<Product> getProduct(@PathVariable("id") Integer id) {
    Product product = productService.getById(id);
    if (product == null) {
        return new ResponseEntity<>(HttpStatus.NOT_FOUND);
    }
    return new ResponseEntity<>(product, HttpStatus.OK);
}

// Get all products
@GetMapping("/getAllProducts")
public ResponseEntity<List<Product>> getAllProducts() {
    List<Product> allProducts = productService.getAllProducts();
    return new ResponseEntity<>(allProducts, HttpStatus.OK);
}

// Update an existing product
@PutMapping("/updateProduct")
public ResponseEntity<String> updateProduct(@RequestBody Product product) {
    String status = productService.upsert(product);
    return new ResponseEntity<>(status, HttpStatus.OK);
}

// Delete a product by ID
@DeleteMapping("/deleteProduct/{id}")
public ResponseEntity<String> deleteProduct(@PathVariable("id") Integer id) {
    String status = productService.deleteById(id);
    if ("Not Found".equals(status)) {
            return new ResponseEntity<>("Product not found", HttpStatus.NOT_FOUND);
        }
        return new ResponseEntity<>(status, HttpStatus.OK);
    }
}
```

ProductService.java

```
package com.example.demo1.service;
import java.util.List;
import com.example.demo1.Product;
public interface ProductService {
    // Method to create or update a product
    String upsert(Product product);
    // Method to retrieve a product by its ID
    Product getById(Integer id);
    // Method to retrieve all products
    List<Product> getAllProducts();
    // Method to delete a product by its ID
    String deleteById(Integer id);
}
```

ProductServiceImpl.java

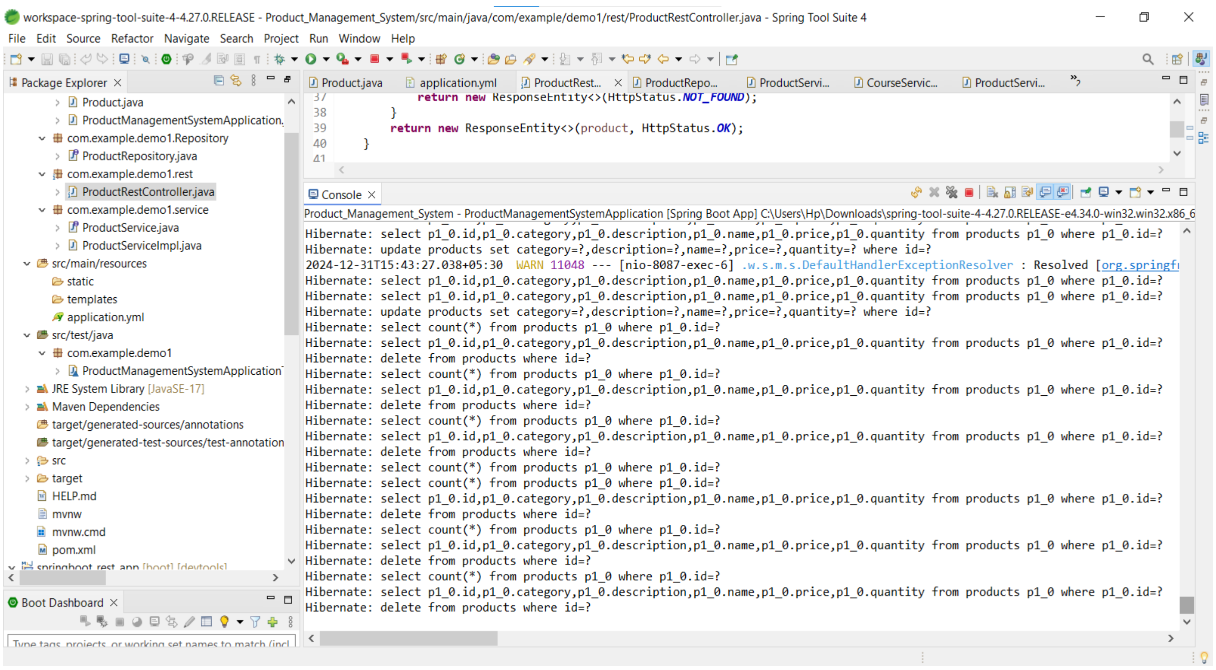
```
package com.example.demo1.service;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.example.demo1.Product;
import com.example.demo1.Repository.ProductRepository;

@Service
public class ProductServiceImpl implements ProductService {

    @Autowired
    private ProductRepository productRepo;

    @Override
    public String upsert(Product product) {
        productRepo.save(product); // Correct repository usage
        return "Product saved successfully with ID: " + product.getId();
    }

    @Override
    public Product getById(Integer id) { // Changed to Integer
        return productRepo.findById(id).orElse(null); // Simplified Optional handling
    }

    @Override
    public List<Product> getAllProducts() { // Correct method name
        return productRepo.findAll();
    }

    @Override
    public String deleteById(Integer id) { // Changed to Integer
        if (productRepo.existsById(id)) {
            productRepo.deleteById(id); // Correct repository usage
            return "Product successfully deleted.";
        } else {
            return "No product found with ID: " + id;
        }
    }
```

Application.yml

```
server:
   port: 8087
spring:
  datasource:
    username: root
    password: Abhi1569*
    url: jdbc:mysql://localhost:3306/abishekmj
    driver-class-name: com.mysql.cj.jdbc.Driver
  jpa:
    hibernate:
```

```
  ddl-auto: update
show-sql: true
```

SNAPSHOTS OF OUTPUT



workspace-spring-tool-suite-4-4.27.0.RELEASE - Product_Management_System/src/main/java/com/example/demo1/rest/ProductRestController.java - Spring Tool Suite 4

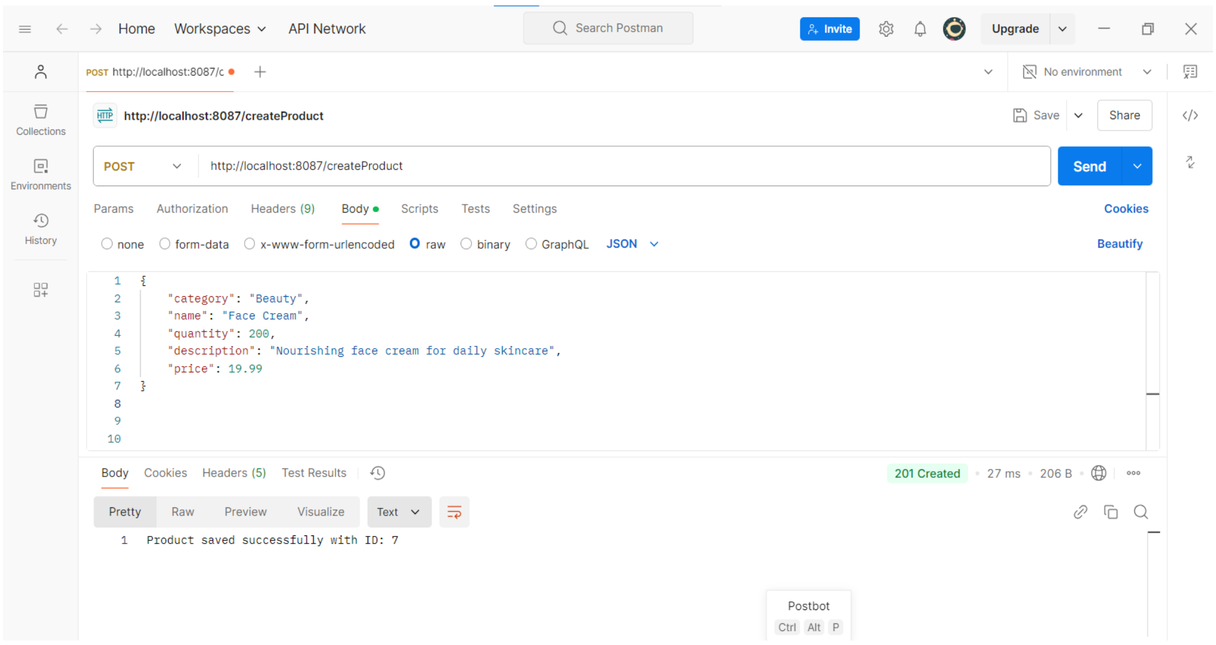
```
            return new ResponseEntity<>(HttpStatus.NOT_FOUND);
        }
        return new ResponseEntity<>(product, HttpStatus.OK);
    }
```

Product_Management_System - ProductManagementSystemApplication [Spring Boot App] C:\Users\Hp\Downloads\spring-tool-suite-4-4.27.0.RELEASE-e4.34.0-win32.win32.x86_6

```
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: update products set category=?,description=?,name=?,price=?,quantity=? where id=?
2024-12-31T15:43:27.038+05:30  WARN 11048 --- [nio-8087-exec-6] .w.s.m.s.DefaultHandlerExceptionResolver : Resolved [org.springfi
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: update products set category=?,description=?,name=?,price=?,quantity=? where id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: delete from products where id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: delete from products where id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: delete from products where id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: delete from products where id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: delete from products where id=?
Hibernate: select count(*) from products p1_0 where p1_0.id=?
Hibernate: select p1_0.id,p1_0.category,p1_0.description,p1_0.name,p1_0.price,p1_0.quantity from products p1_0 where p1_0.id=?
Hibernate: delete from products where id=?
```

POSTMAN CRUD OPERATIONS

POST OPERATION

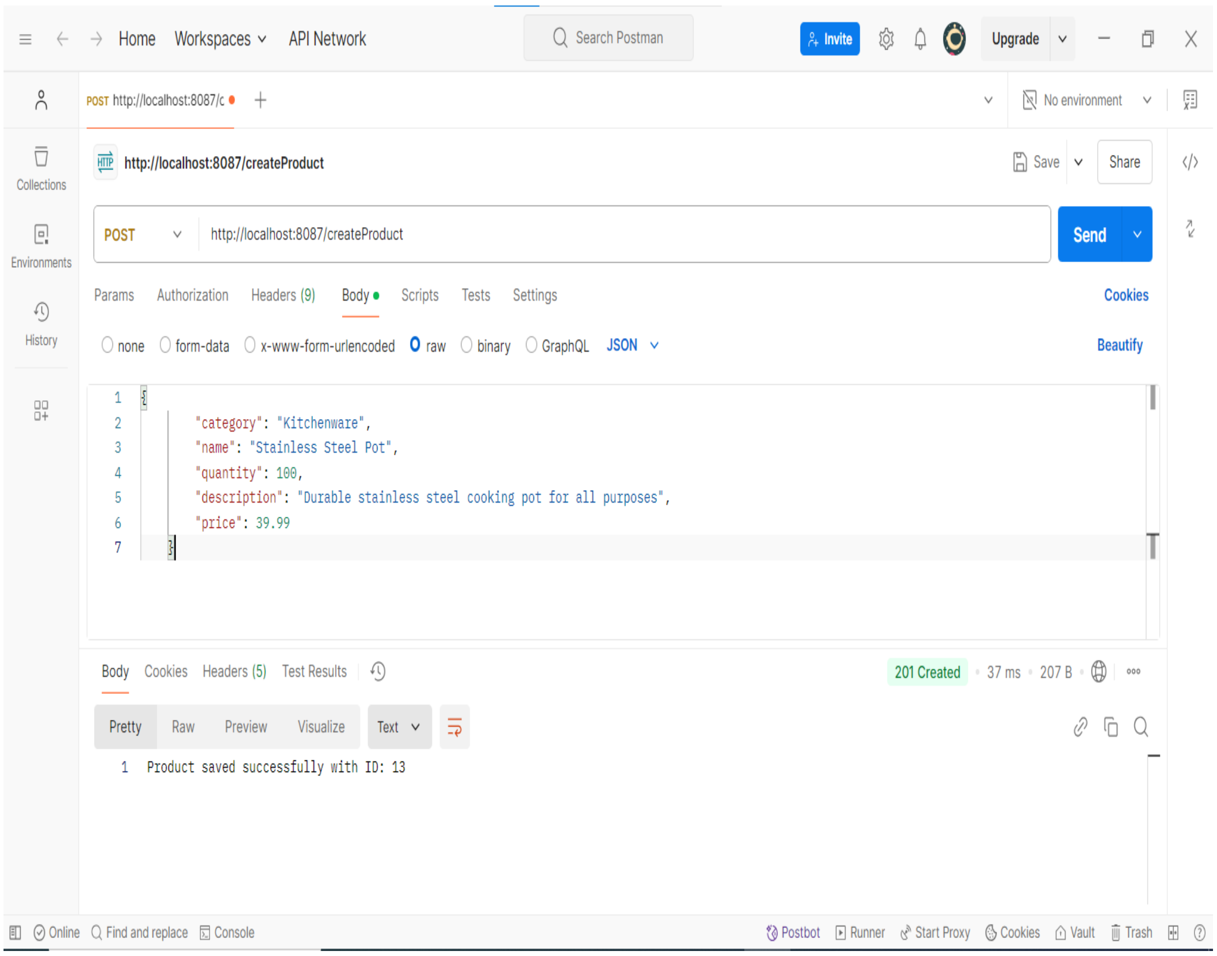


POST http://localhost:8087/createProduct

```
{
    "category": "Beauty",
    "name": "Face Cream",
    "quantity": 200,
    "description": "Nourishing face cream for daily skincare",
    "price": 19.99
}
```

201 Created · 27 ms · 206 B

```
Product saved successfully with ID: 7
```



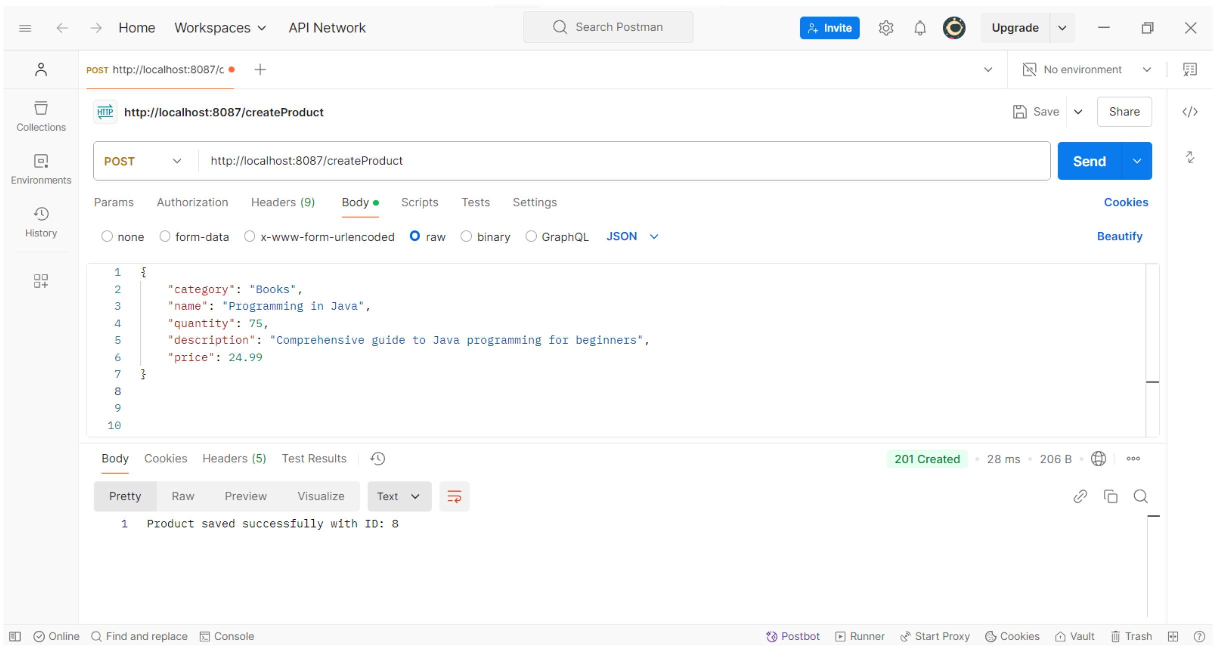
POST http://localhost:8087/createProduct

none form-data x-www-form-urlencoded [✓ raw] binary GraphQL JSON

```
{
    "category": "Kitchenware",
    "name": "Stainless Steel Pot",
    "quantity": 100,
    "description": "Durable stainless steel cooking pot for all purposes",
    "price": 39.99
}
```

Body Cookies Headers (5) Test Results — 201 Created · 37 ms · 207 B

```
Product saved successfully with ID: 13
```



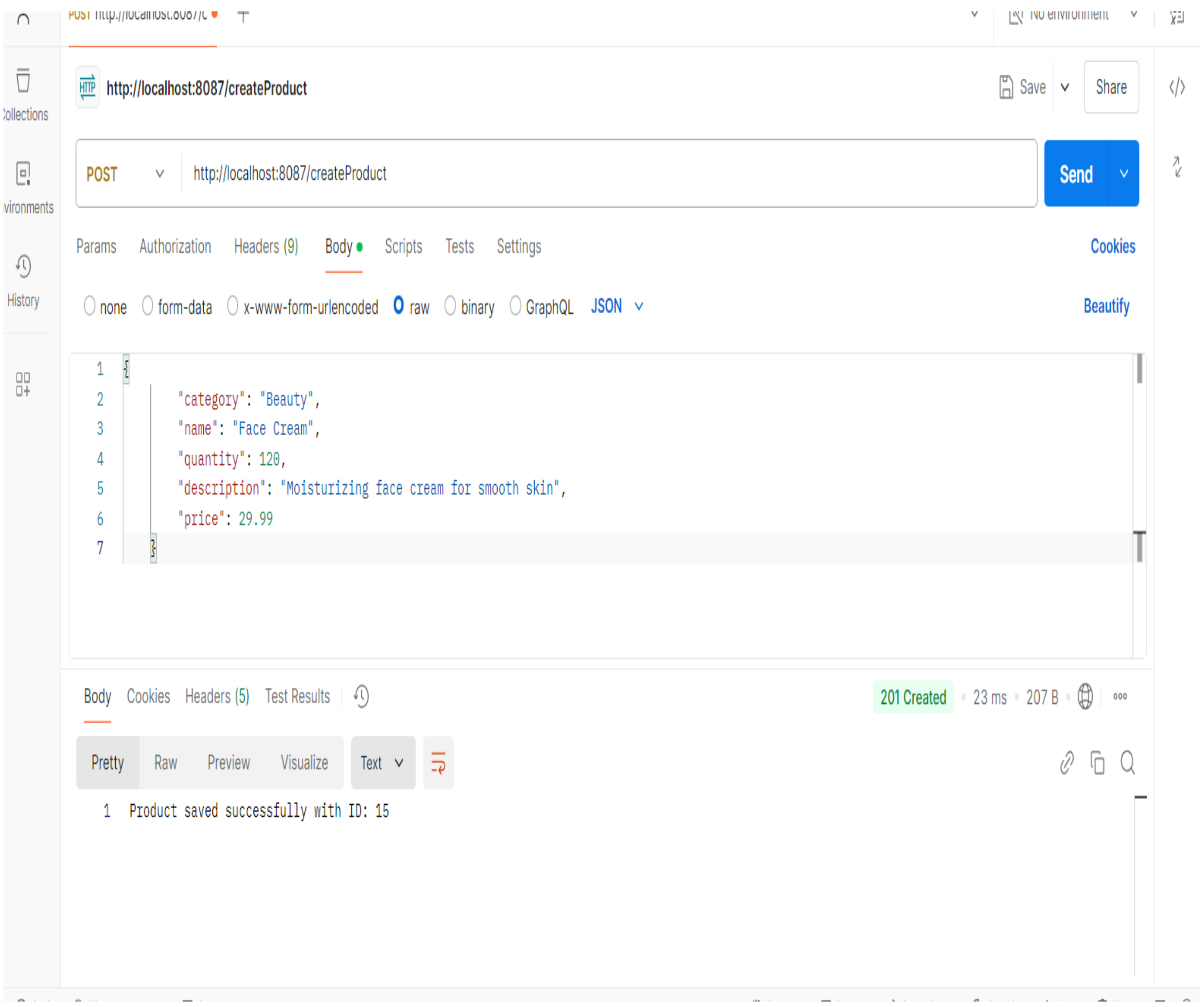
POST http://localhost:8087/createProduct

none form-data x-www-form-urlencoded [✓ raw] binary GraphQL JSON

```
{
    "category": "Books",
    "name": "Programming in Java",
    "quantity": 75,
    "description": "Comprehensive guide to Java programming for beginners",
    "price": 24.99
}
```

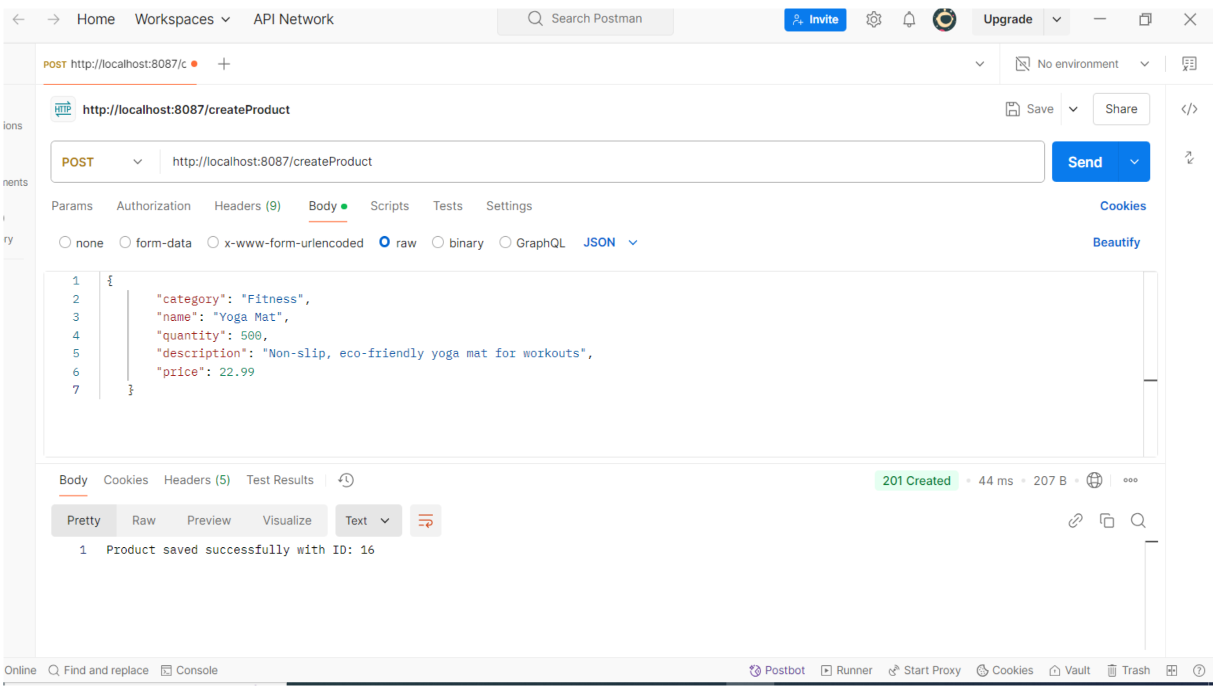
Body Cookies Headers (5) Test Results — 201 Created · 28 ms · 206 B

```
Product saved successfully with ID: 8
```



```
{
    "category": "Beauty",
    "name": "Face Cream",
    "quantity": 120,
    "description": "Moisturizing face cream for smooth skin",
    "price": 29.99
}
```

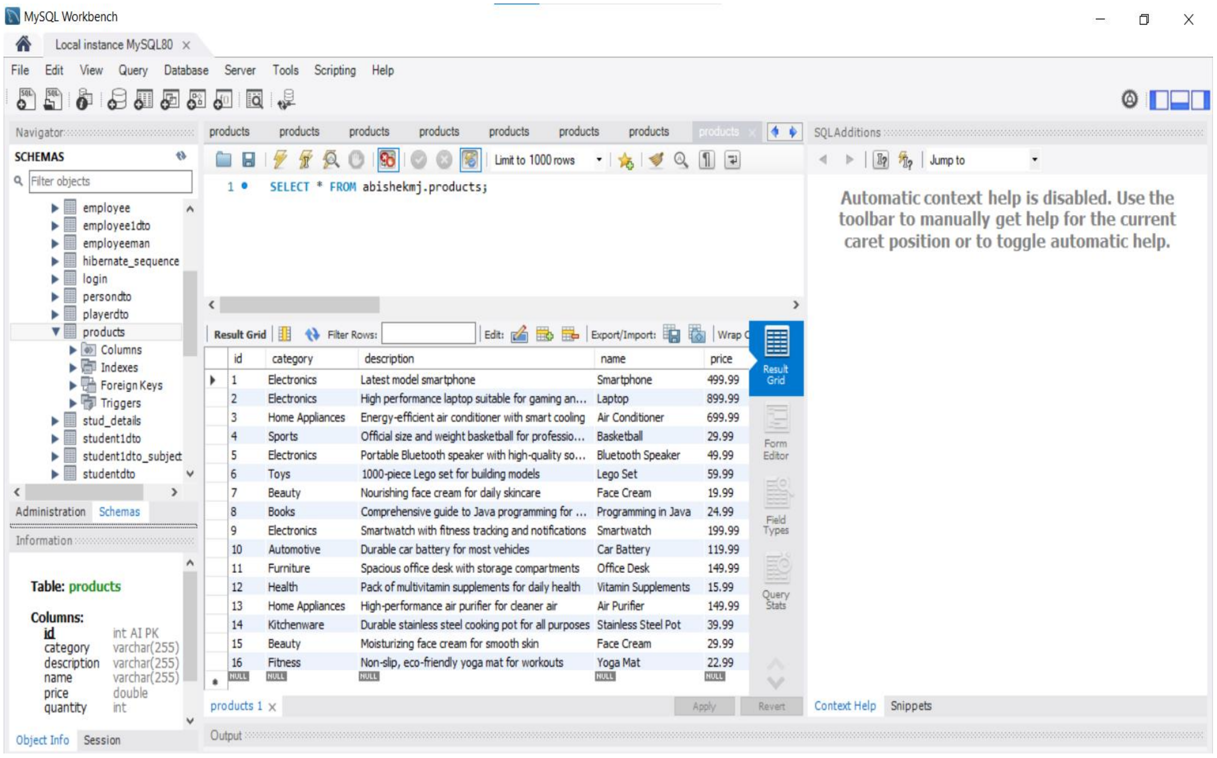
```
Product saved successfully with ID: 15
```



```
{
    "category": "Fitness",
    "name": "Yoga Mat",
    "quantity": 500,
    "description": "Non-slip, eco-friendly yoga mat for workouts",
    "price": 22.99
}
```

```
Product saved successfully with ID: 16
```

After Inserting the Data the Data is Completely Inserted to Database Table In Mysql



```
SELECT * FROM abishekmj.products;
```

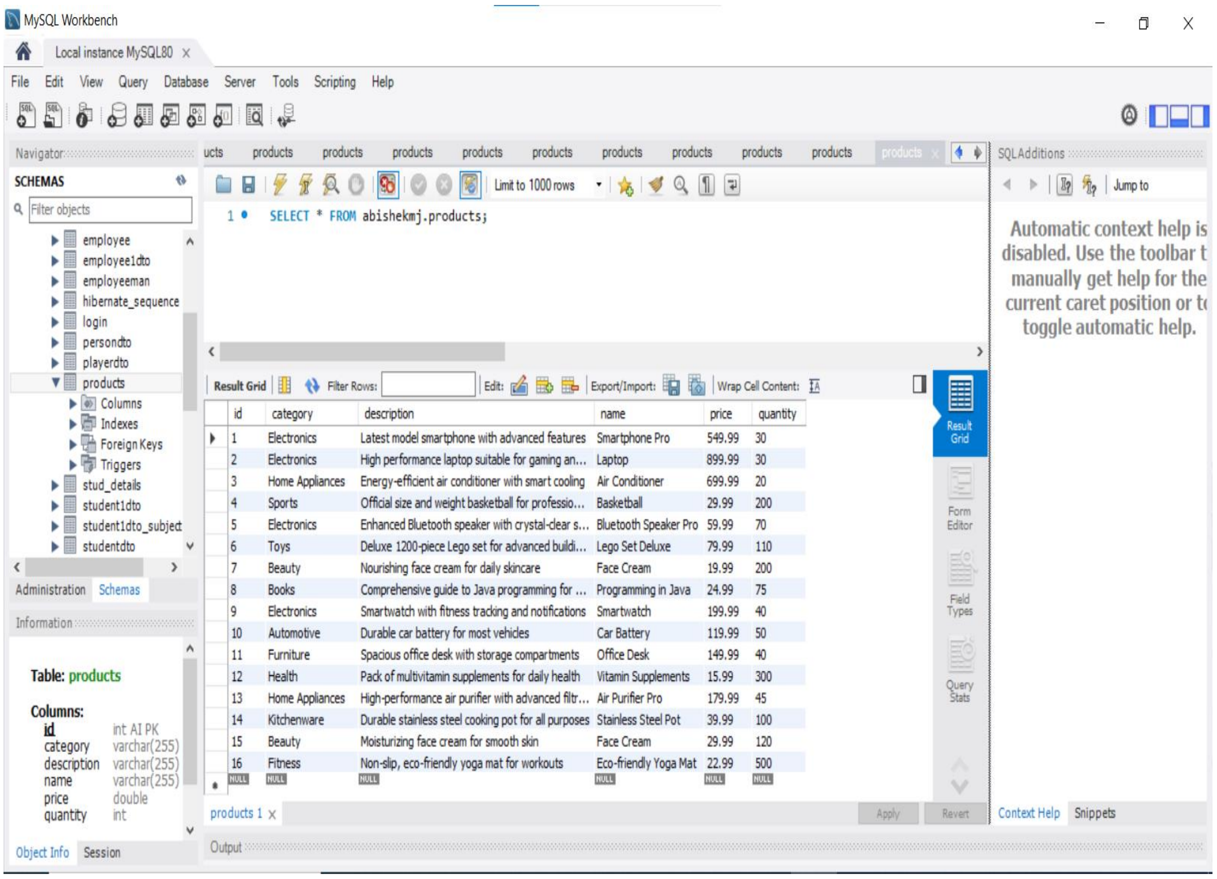
id	category	description	name	price
1	Electronics	Latest model smartphone	Smartphone	499.99
2	Electronics	High performance laptop suitable for gaming an...	Laptop	899.99
3	Home Appliances	Energy-efficient air conditioner with smart cooling	Air Conditioner	699.99
4	Sports	Official size and weight basketball for professio...	Basketball	29.99
5	Electronics	Portable Bluetooth speaker with high-quality so...	Bluetooth Speaker	49.99
6	Toys	1000-piece Lego set for building models	Lego Set	59.99
7	Beauty	Nourishing face cream for daily skincare	Face Cream	19.99
8	Books	Comprehensive guide to Java programming for ...	Programming in Java	24.99
9	Electronics	Smartwatch with fitness tracking and notifications	Smartwatch	199.99
10	Automotive	Durable car battery for most vehicles	Car Battery	119.99
11	Furniture	Spacious office desk with storage compartments	Office Desk	149.99
12	Health	Pack of multivitamin supplements for daily health	Vitamin Supplements	15.99
13	Home Appliances	High-performance air purifier for cleaner air	Air Purifier	149.99
14	Kitchenware	Durable stainless steel cooking pot for all purposes	Stainless Steel Pot	39.99
15	Beauty	Moisturizing face cream for smooth skin	Face Cream	29.99
16	Fitness	Non-slip, eco-friendly yoga mat for workouts	Yoga Mat	22.99
NULL	NULL	NULL	NULL	NULL

Table: products

Columns:

id	int AI PK
category	varchar(255)
description	varchar(255)
name	varchar(255)
price	double
quantity	int

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.



```
SELECT * FROM abishekmj.products;
```

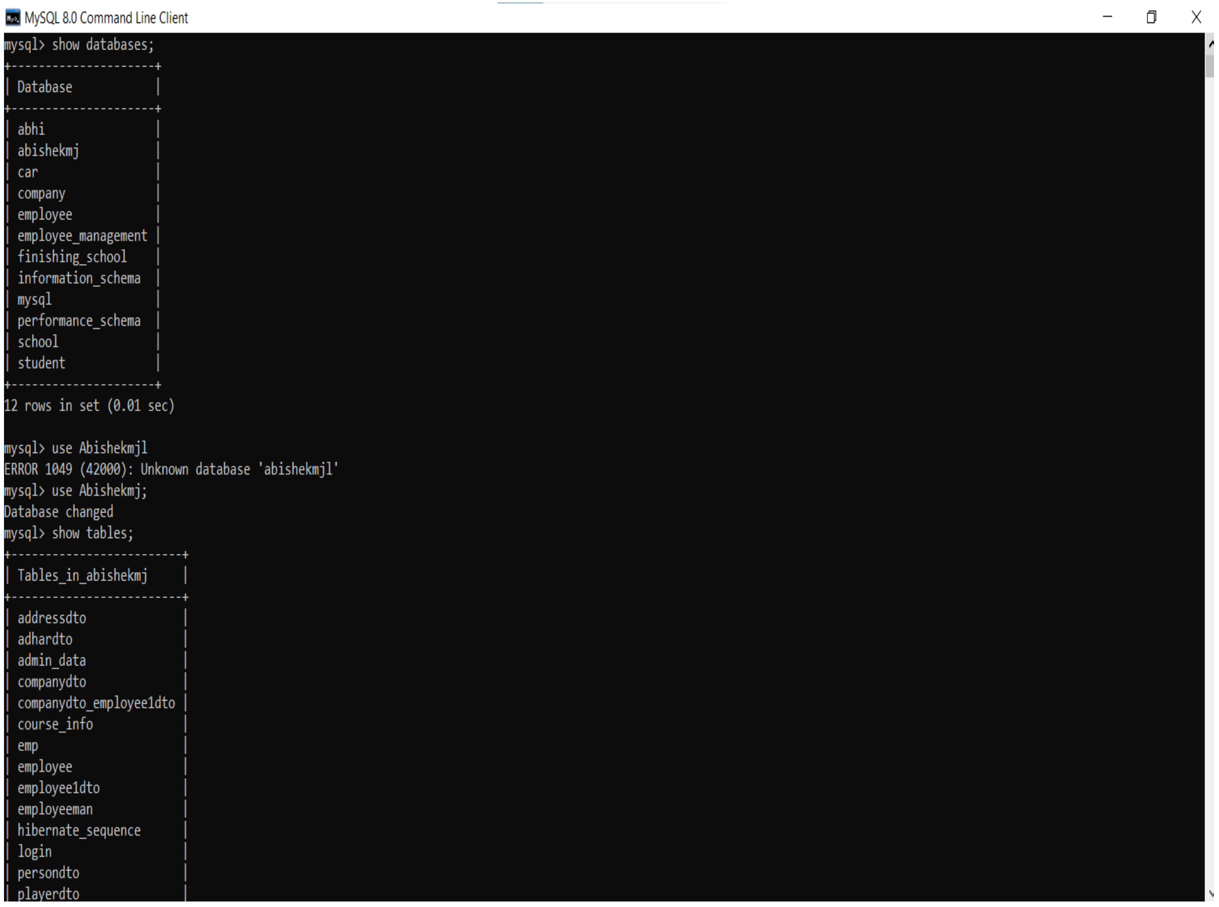
id	category	description	name	price	quantity
1	Electronics	Latest model smartphone with advanced features	Smartphone Pro	549.99	30
2	Electronics	High performance laptop suitable for gaming an...	Laptop	899.99	30
3	Home Appliances	Energy-efficient air conditioner with smart cooling	Air Conditioner	699.99	20
4	Sports	Official size and weight basketball for professio...	Basketball	29.99	200
5	Electronics	Enhanced Bluetooth speaker with crystal-clear s...	Bluetooth Speaker Pro	59.99	70
6	Toys	Deluxe 1200-piece Lego set for advanced buildi...	Lego Set Deluxe	79.99	110
7	Beauty	Nourishing face cream for daily skincare	Face Cream	19.99	200
8	Books	Comprehensive guide to Java programming for ...	Programming in Java	24.99	75
9	Electronics	Smartwatch with fitness tracking and notifications	Smartwatch	199.99	40
10	Automotive	Durable car battery for most vehicles	Car Battery	119.99	50
11	Furniture	Spacious office desk with storage compartments	Office Desk	149.99	40
12	Health	Pack of multivitamin supplements for daily health	Vitamin Supplements	15.99	300
13	Home Appliances	High-performance air purifier with advanced filtr...	Air Purifier Pro	179.99	45
14	Kitchenware	Durable stainless steel cooking pot for all purposes	Stainless Steel Pot	39.99	100
15	Beauty	Moisturizing face cream for smooth skin	Face Cream	29.99	120
16	Fitness	Non-slip, eco-friendly yoga mat for workouts	Eco-friendly Yoga Mat	22.99	500
NULL	NULL	NULL	NULL	NULL	NULL

Table: products

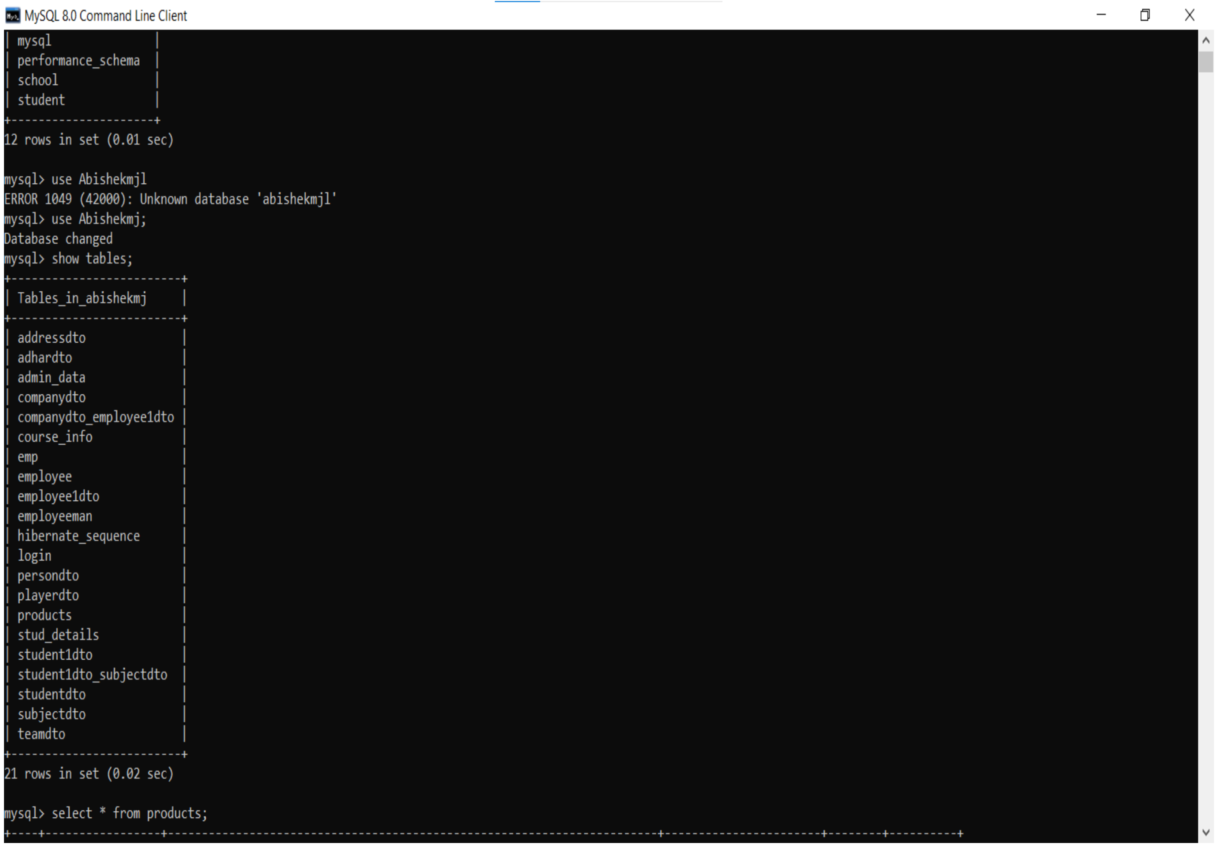
Columns:

id	int AI PK
category	varchar(255)
description	varchar(255)
name	varchar(255)
price	double
quantity	int

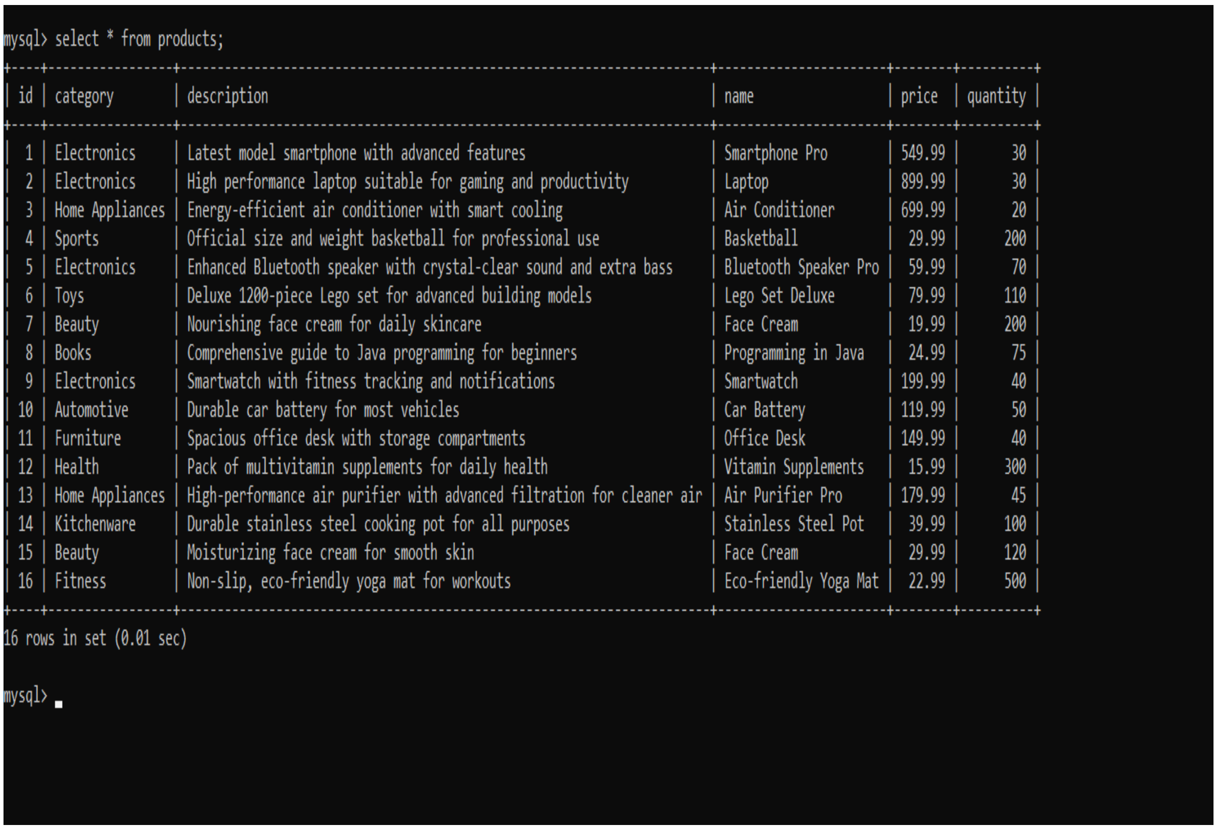
Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or t toggle automatic help.


MySQL 8.0 Command Line Client

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| abhi               |
| abishekmj          |
| car                |
| company            |
| employee           |
| employee_management |
| finishing_school   |
| information_schema |
| mysql              |
| performance_schema |
| school             |
| student            |
+--------------------+
12 rows in set (0.01 sec)

mysql> use Abishekmjl
ERROR 1049 (42000): Unknown database 'abishekmjl'
mysql> use Abishekmj;
Database changed
mysql> show tables;
+------------------------+
| Tables_in_abishekmj    |
+------------------------+
| addressdto             |
| adhardto               |
| admin_data             |
| companydto             |
| companydto_employee1dto |
| course_info            |
| emp                    |
| employee               |
| employee1dto           |
| employeeman            |
| hibernate_sequence     |
| login                  |
| persondto              |
| playerdto              |
```

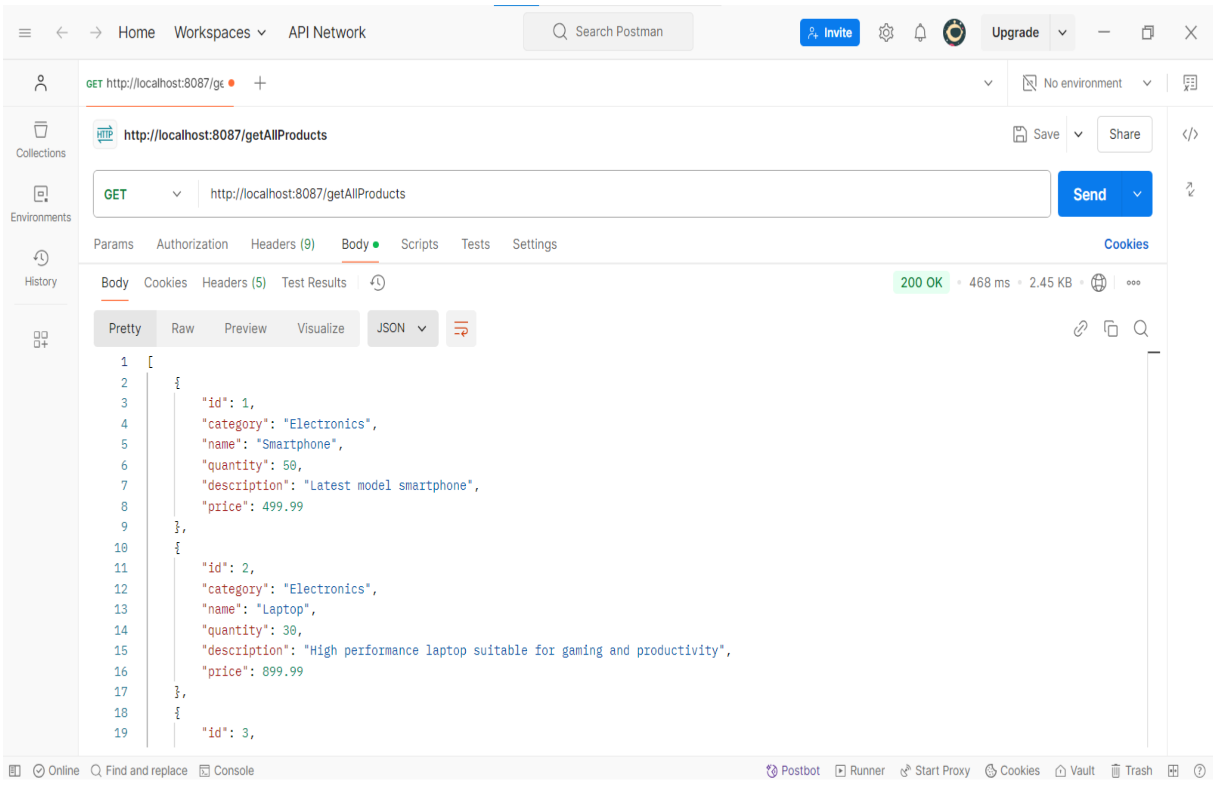

MySQL 8.0 Command Line Client

```
| mysql              |
| performance_schema |
| school             |
| student            |
+--------------------+
12 rows in set (0.01 sec)

mysql> use Abishekmjl
ERROR 1049 (42000): Unknown database 'abishekmjl'
mysql> use Abishekmj;
Database changed
mysql> show tables;
+------------------------+
| Tables_in_abishekmj    |
+------------------------+
| addressdto             |
| adhardto               |
| admin_data             |
| companydto             |
| companydto_employee1dto |
| course_info            |
| emp                    |
| employee               |
| employee1dto           |
| employeeman            |
| hibernate_sequence     |
| login                  |
| persondto              |
| playerdto              |
| products               |
| stud_details           |
| student1dto            |
| student1dto_subjectdto |
| studentdto             |
| subjectdto             |
| teamdto                |
+------------------------+
21 rows in set (0.02 sec)

mysql> select * from products;
+----+----------------+------------------------------------------------------------------------+--------------------+--------+----------+
```



```
mysql> select * from products;
+----+-----------------+------------------------------------------------------------------------+-----------------------+--------+----------+
| id | category        | description                                                            | name                  | price  | quantity |
+----+-----------------+------------------------------------------------------------------------+-----------------------+--------+----------+
|  1 | Electronics     | Latest model smartphone with advanced features                         | Smartphone Pro        | 549.99 |       30 |
|  2 | Electronics     | High performance laptop suitable for gaming and productivity           | Laptop                | 899.99 |       30 |
|  3 | Home Appliances | Energy-efficient air conditioner with smart cooling                    | Air Conditioner       | 699.99 |       20 |
|  4 | Sports          | Official size and weight basketball for professional use               | Basketball            |  29.99 |      200 |
|  5 | Electronics     | Enhanced Bluetooth speaker with crystal-clear sound and extra bass     | Bluetooth Speaker Pro |  59.99 |       70 |
|  6 | Toys            | Deluxe 1200-piece Lego set for advanced building models                | Lego Set Deluxe       |  79.99 |      110 |
|  7 | Beauty          | Nourishing face cream for daily skincare                               | Face Cream            |  19.99 |      200 |
|  8 | Books           | Comprehensive guide to Java programming for beginners                  | Programming in Java   |  24.99 |       75 |
|  9 | Electronics     | Smartwatch with fitness tracking and notifications                     | Smartwatch            | 199.99 |       40 |
| 10 | Automotive      | Durable car battery for most vehicles                                  | Car Battery           | 119.99 |       50 |
| 11 | Furniture       | Spacious office desk with storage compartments                         | Office Desk           | 149.99 |       40 |
| 12 | Health          | Pack of multivitamin supplements for daily health                      | Vitamin Supplements   |  15.99 |      300 |
| 13 | Home Appliances | High-performance air purifier with advanced filtration for cleaner air | Air Purifier Pro      | 179.99 |       45 |
| 14 | Kitchenware     | Durable stainless steel cooking pot for all purposes                   | Stainless Steel Pot   |  39.99 |      100 |
| 15 | Beauty          | Moisturizing face cream for smooth skin                                | Face Cream            |  29.99 |      120 |
| 16 | Fitness         | Non-slip, eco-friendly yoga mat for workouts                           | Eco-friendly Yoga Mat |  22.99 |      500 |
+----+-----------------+------------------------------------------------------------------------+-----------------------+--------+----------+
16 rows in set (0.01 sec)

mysql> 
```

<u>GET METHOD TO GET ALL THE PRODUCTS</u>

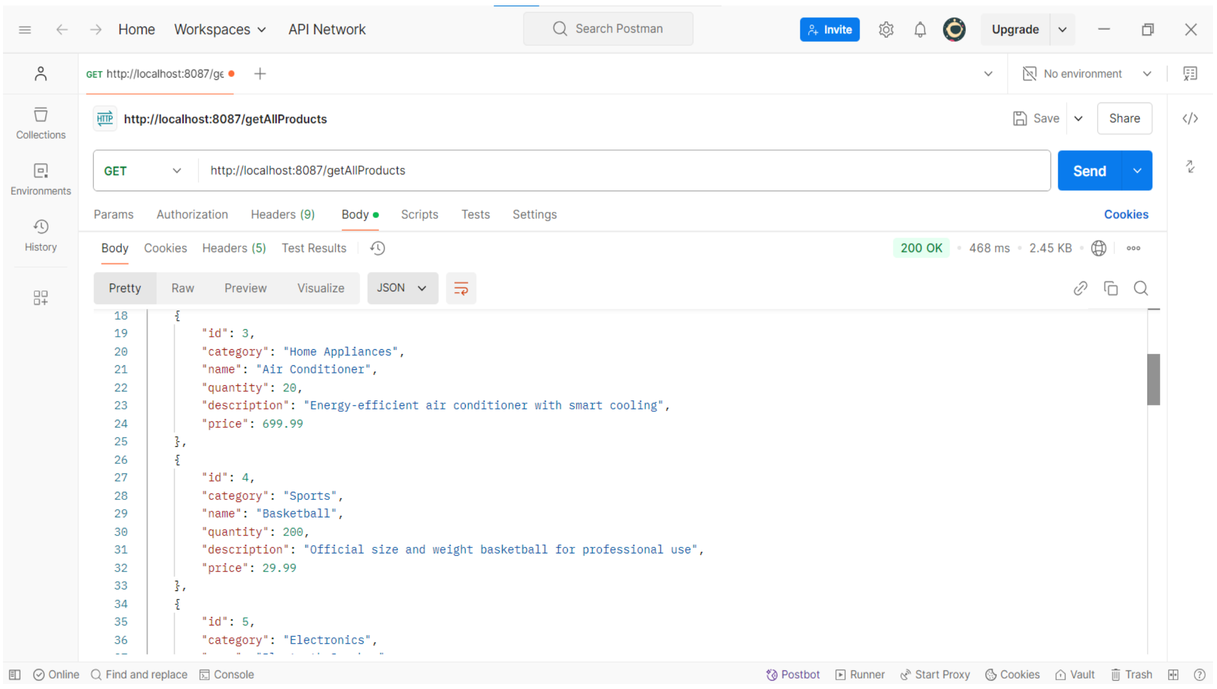


http://localhost:8087/getAllProducts

GET http://localhost:8087/getAllProducts Send

Body Cookies Headers (5) Test Results — 200 OK · 468 ms · 2.45 KB

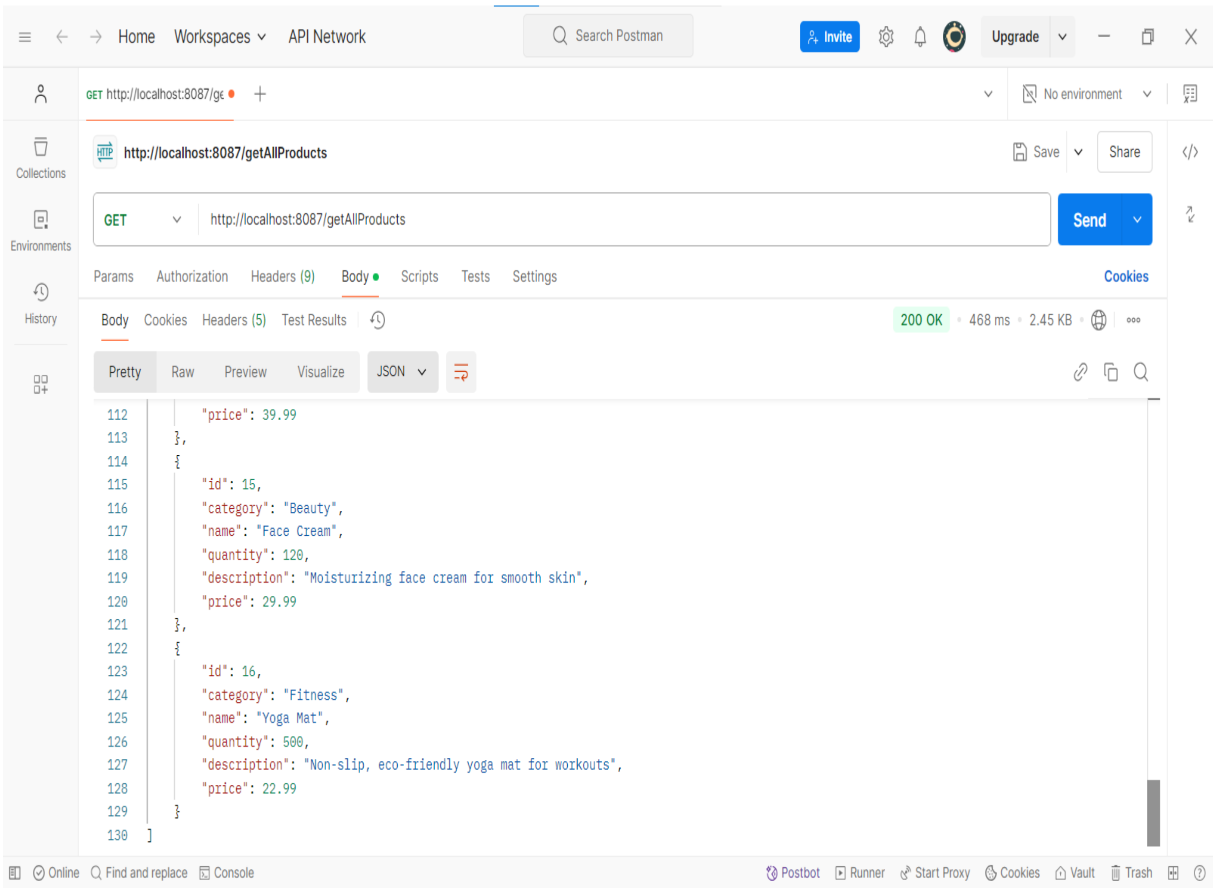
```
[
    {
        "id": 1,
        "category": "Electronics",
        "name": "Smartphone",
        "quantity": 50,
        "description": "Latest model smartphone",
        "price": 499.99
    },
    {
        "id": 2,
        "category": "Electronics",
        "name": "Laptop",
        "quantity": 30,
        "description": "High performance laptop suitable for gaming and productivity",
        "price": 899.99
    },
    {
        "id": 3,
```



GET http://localhost:8087/getAllProducts

Body Cookies Headers (5) Test Results — 200 OK · 468 ms · 2.45 KB

```
    {
        "id": 3,
        "category": "Home Appliances",
        "name": "Air Conditioner",
        "quantity": 20,
        "description": "Energy-efficient air conditioner with smart cooling",
        "price": 699.99
    },
    {
        "id": 4,
        "category": "Sports",
        "name": "Basketball",
        "quantity": 200,
        "description": "Official size and weight basketball for professional use",
        "price": 29.99
    },
    {
        "id": 5,
        "category": "Electronics",
```

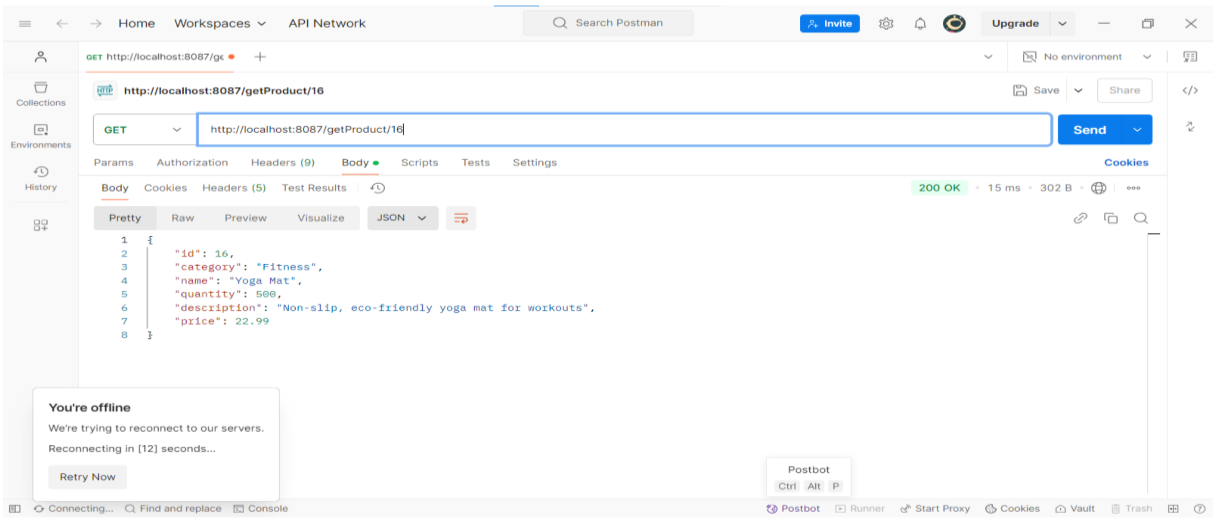


GET http://localhost:8087/getAllProducts

Body Cookies Headers (5) Test Results — 200 OK · 468 ms · 2.45 KB

```
        "price": 39.99
    },
    {
        "id": 15,
        "category": "Beauty",
        "name": "Face Cream",
        "quantity": 120,
        "description": "Moisturizing face cream for smooth skin",
        "price": 29.99
    },
    {
        "id": 16,
        "category": "Fitness",
        "name": "Yoga Mat",
        "quantity": 500,
        "description": "Non-slip, eco-friendly yoga mat for workouts",
        "price": 22.99
    }
]
```

GET METHOD TO GET PARTICULAR RECORD BY ID



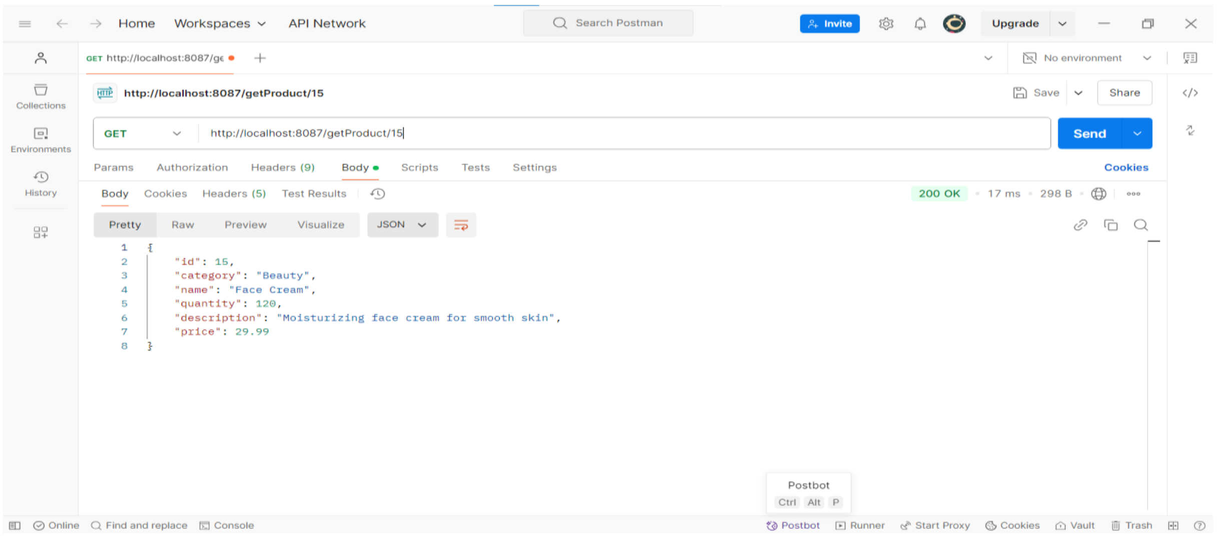
http://localhost:8087/getProduct/16

GET http://localhost:8087/getProduct/16

200 OK · 15 ms · 302 B

```
{
    "id": 16,
    "category": "Fitness",
    "name": "Yoga Mat",
    "quantity": 500,
    "description": "Non-slip, eco-friendly yoga mat for workouts",
    "price": 22.99
}
```

You're offline
We're trying to reconnect to our servers.
Reconnecting in [12] seconds...
Retry Now

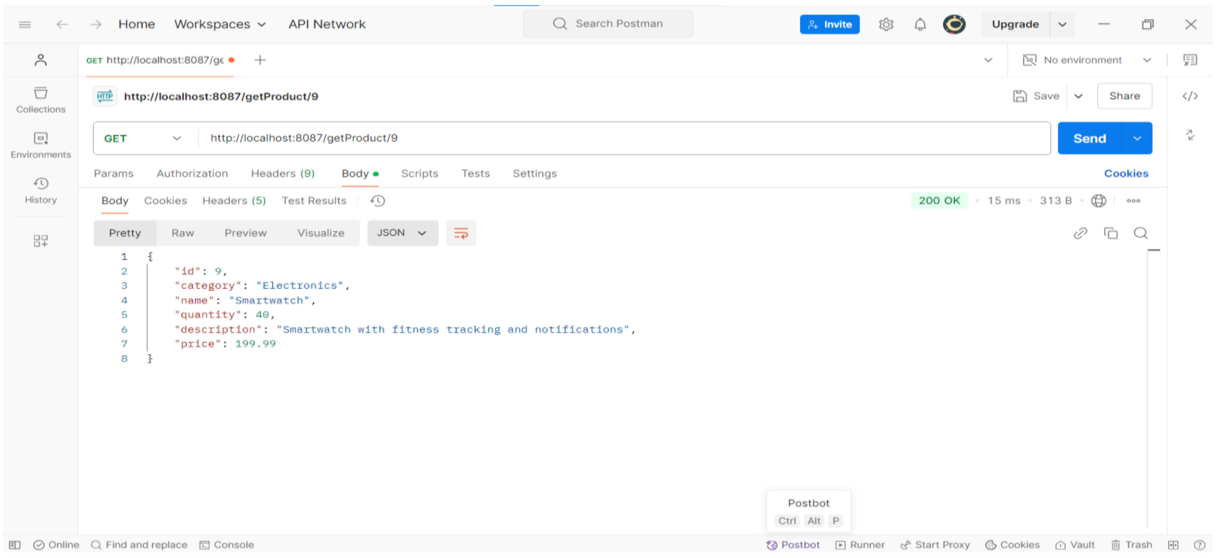


http://localhost:8087/getProduct/15

GET http://localhost:8087/getProduct/15

200 OK · 17 ms · 298 B

```
{
    "id": 15,
    "category": "Beauty",
    "name": "Face Cream",
    "quantity": 120,
    "description": "Moisturizing face cream for smooth skin",
    "price": 29.99
}
```

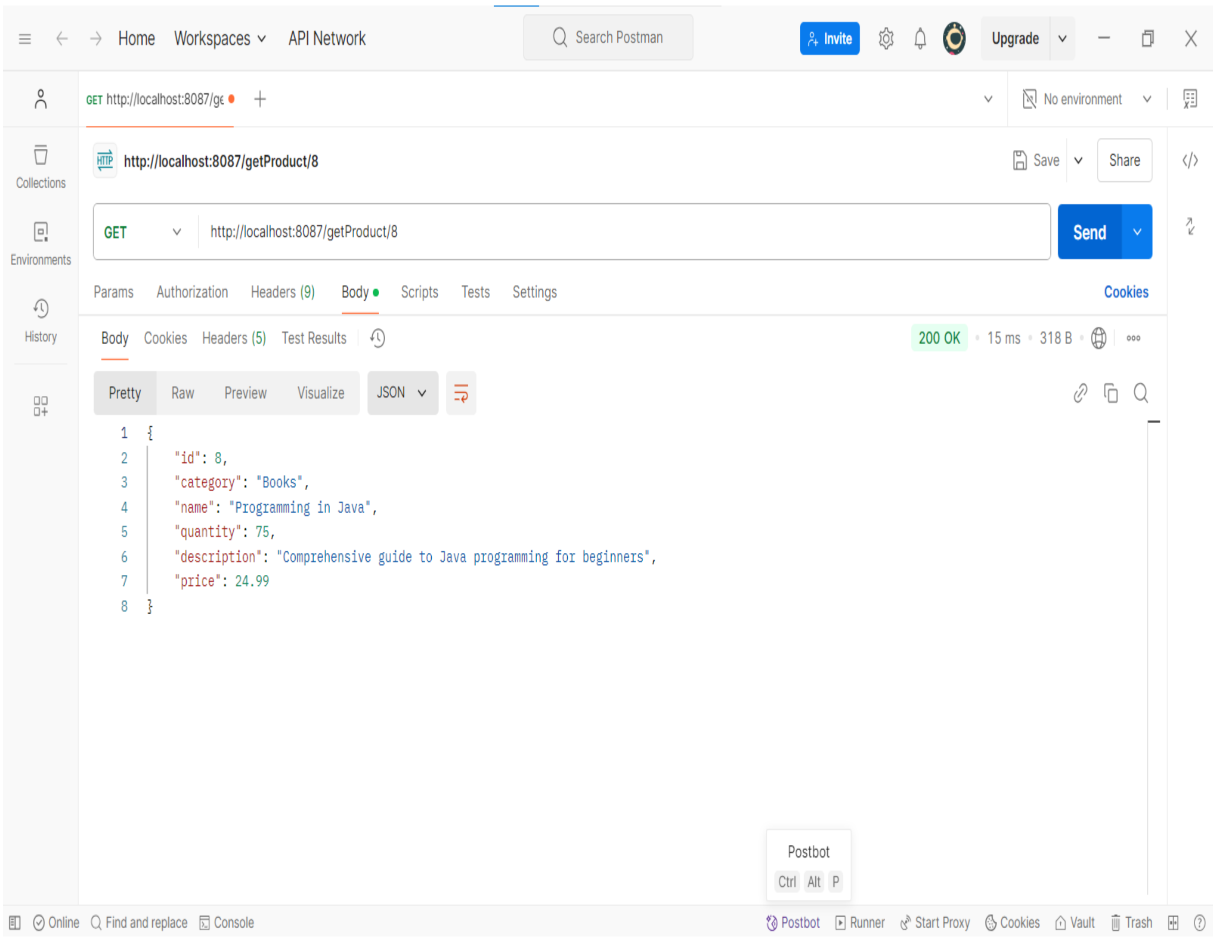


http://localhost:8087/getProduct/9

GET http://localhost:8087/getProduct/9

200 OK · 15 ms · 313 B

```
{
    "id": 9,
    "category": "Electronics",
    "name": "Smartwatch",
    "quantity": 40,
    "description": "Smartwatch with fitness tracking and notifications",
    "price": 199.99
}
```

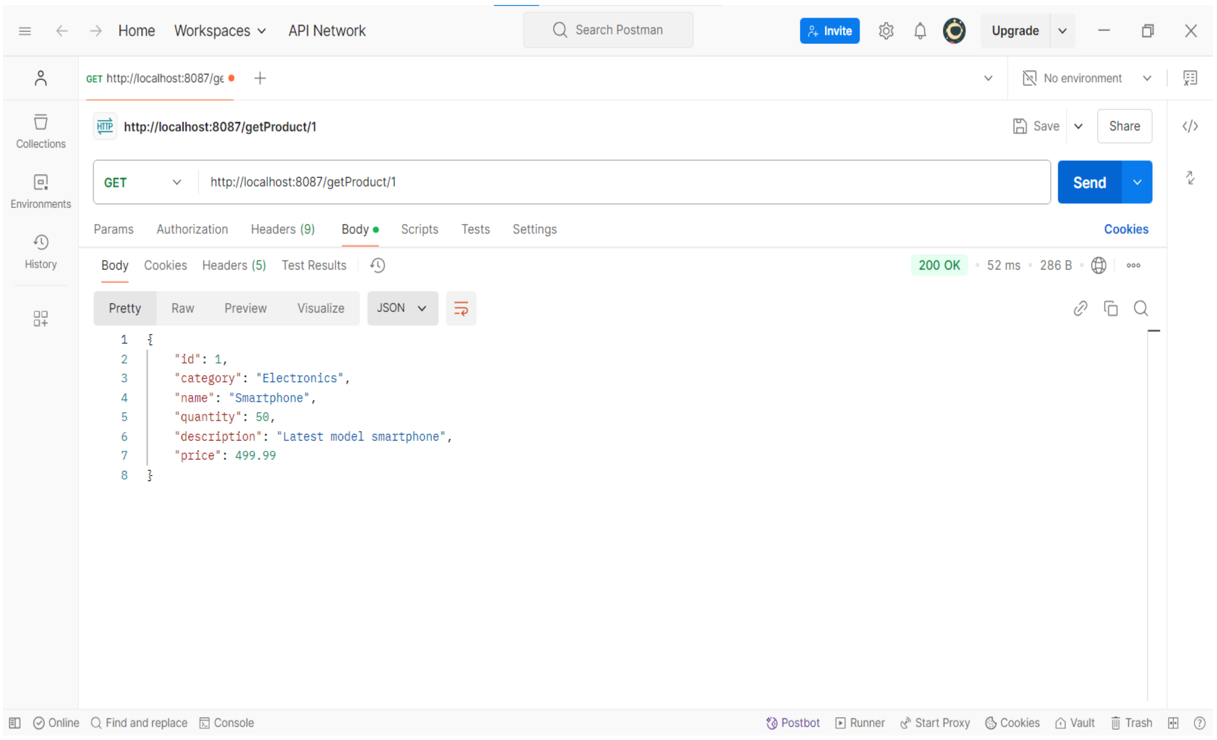


http://localhost:8087/getProduct/8

GET http://localhost:8087/getProduct/8 Send

Body Cookies Headers (5) Test Results 200 OK 15 ms 318 B

```
{
    "id": 8,
    "category": "Books",
    "name": "Programming in Java",
    "quantity": 75,
    "description": "Comprehensive guide to Java programming for beginners",
    "price": 24.99
}
```



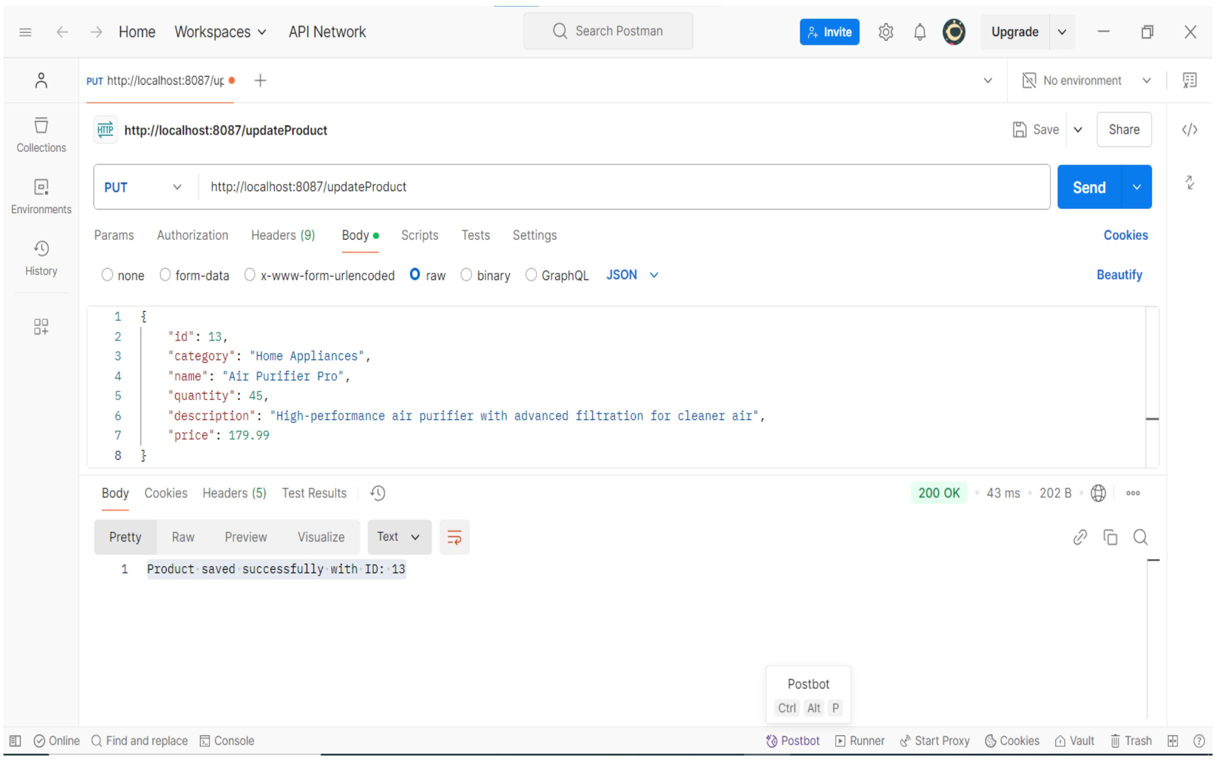
http://localhost:8087/getProduct/1

GET http://localhost:8087/getProduct/1 Send

Body Cookies Headers (5) Test Results 200 OK 52 ms 286 B

```
{
    "id": 1,
    "category": "Electronics",
    "name": "Smartphone",
    "quantity": 50,
    "description": "Latest model smartphone",
    "price": 499.99
}
```

PUT METHOD IN ORDER TO UPDATE THE EXISTING DATA



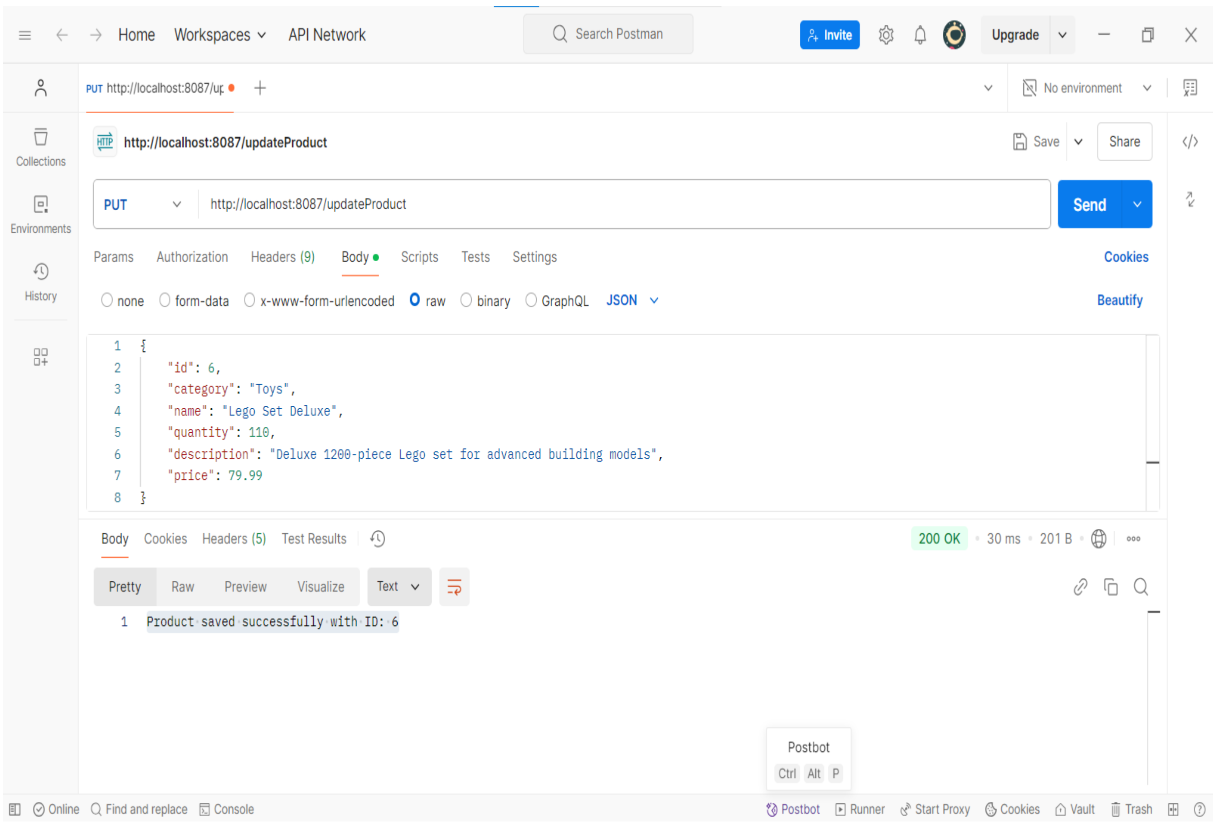
PUT http://localhost:8087/updateProduct

Body: raw JSON

```
{
    "id": 13,
    "category": "Home Appliances",
    "name": "Air Purifier Pro",
    "quantity": 45,
    "description": "High-performance air purifier with advanced filtration for cleaner air",
    "price": 179.99
}
```

200 OK · 43 ms · 202 B

```
Product saved successfully with ID: 13
```



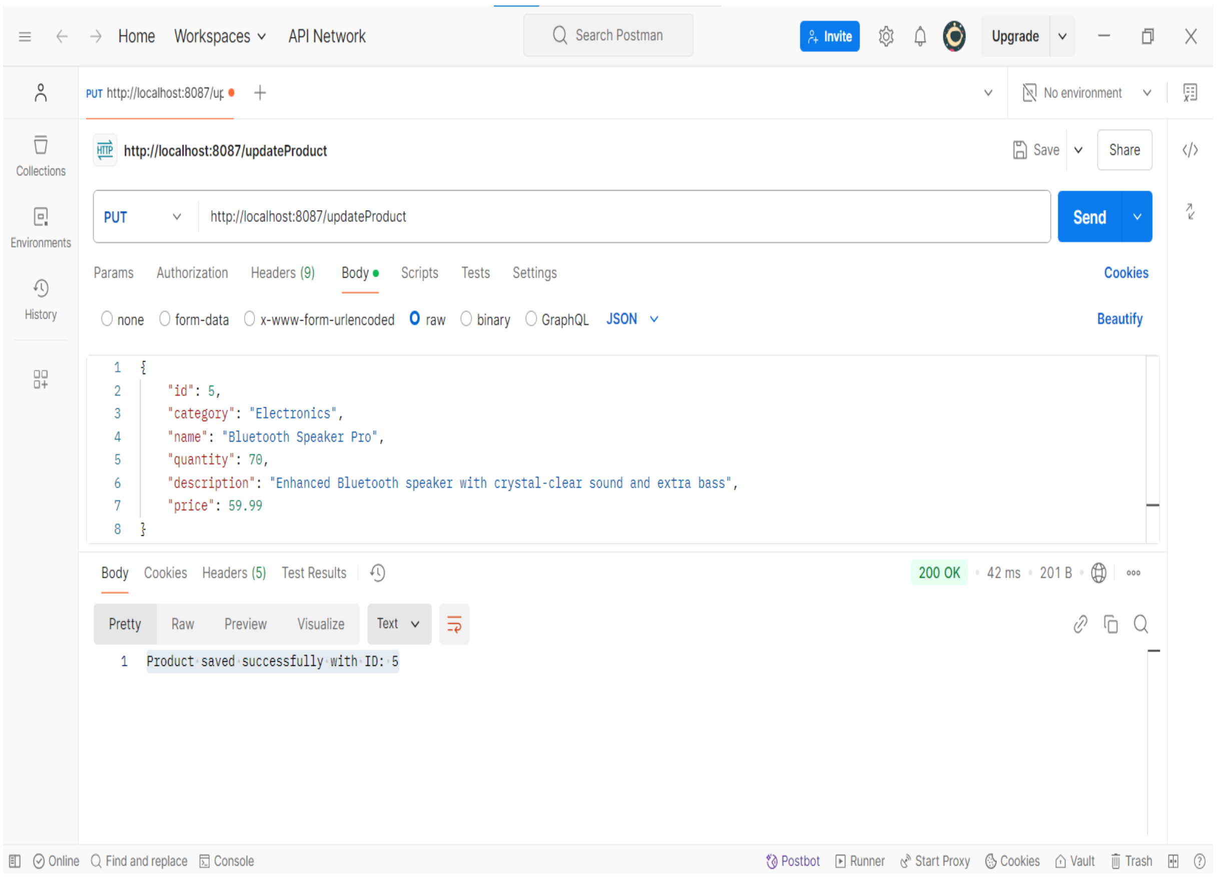
PUT http://localhost:8087/updateProduct

Body: raw JSON

```
{
    "id": 6,
    "category": "Toys",
    "name": "Lego Set Deluxe",
    "quantity": 110,
    "description": "Deluxe 1200-piece Lego set for advanced building models",
    "price": 79.99
}
```

200 OK · 30 ms · 201 B

```
Product saved successfully with ID: 6
```



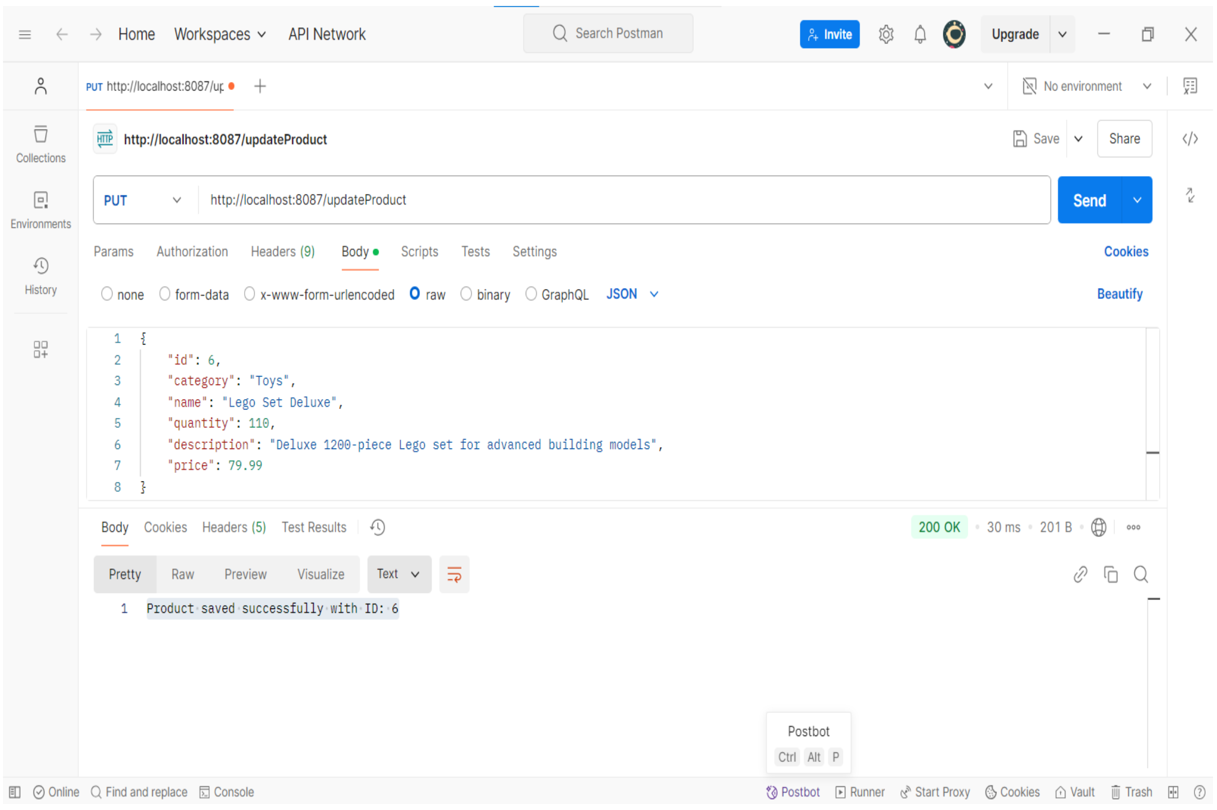
PUT http://localhost:8087/updateProduct

Body: raw JSON

```
{
    "id": 5,
    "category": "Electronics",
    "name": "Bluetooth Speaker Pro",
    "quantity": 70,
    "description": "Enhanced Bluetooth speaker with crystal-clear sound and extra bass",
    "price": 59.99
}
```

200 OK · 42 ms · 201 B

```
Product saved successfully with ID: 5
```



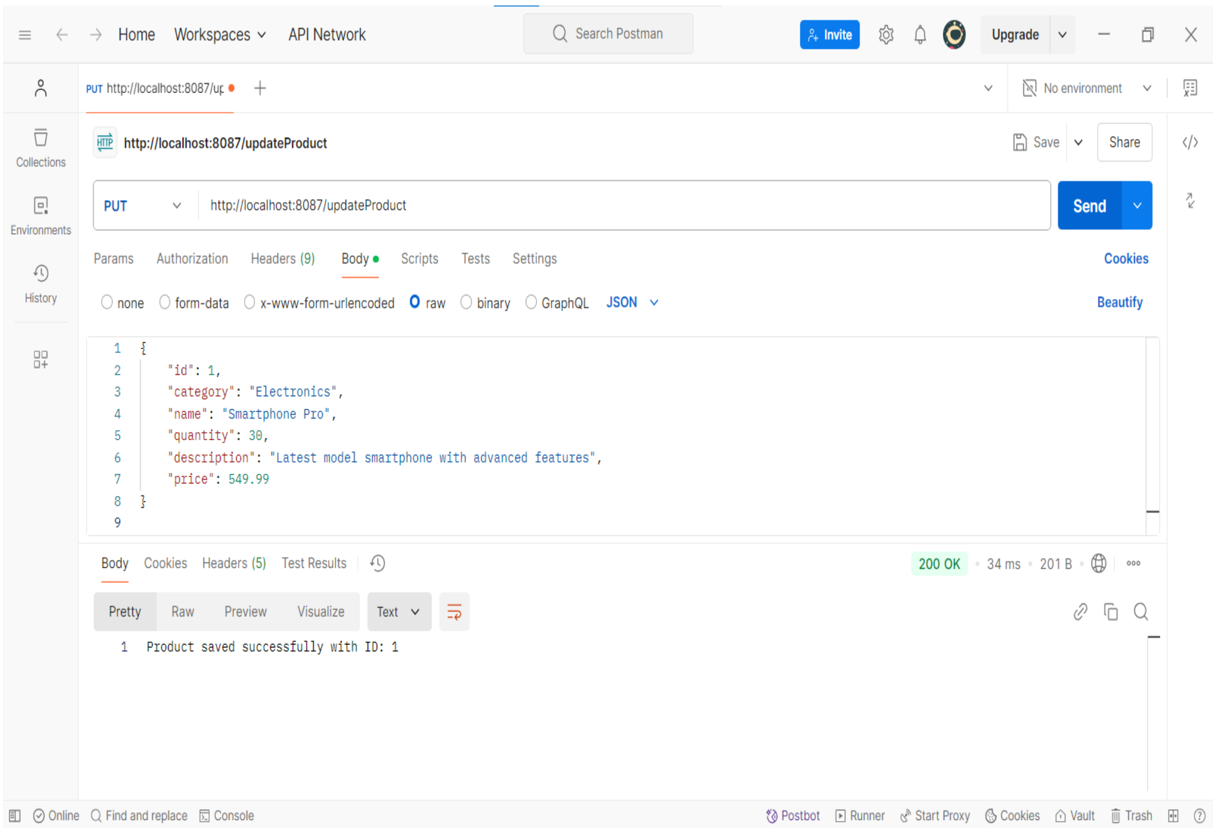
PUT http://localhost:8087/updateProduct

Body: raw JSON

```
{
    "id": 6,
    "category": "Toys",
    "name": "Lego Set Deluxe",
    "quantity": 110,
    "description": "Deluxe 1200-piece Lego set for advanced building models",
    "price": 79.99
}
```

200 OK · 30 ms · 201 B

```
Product saved successfully with ID: 6
```



http://localhost:8087/updateProduct

PUT http://localhost:8087/updateProduct

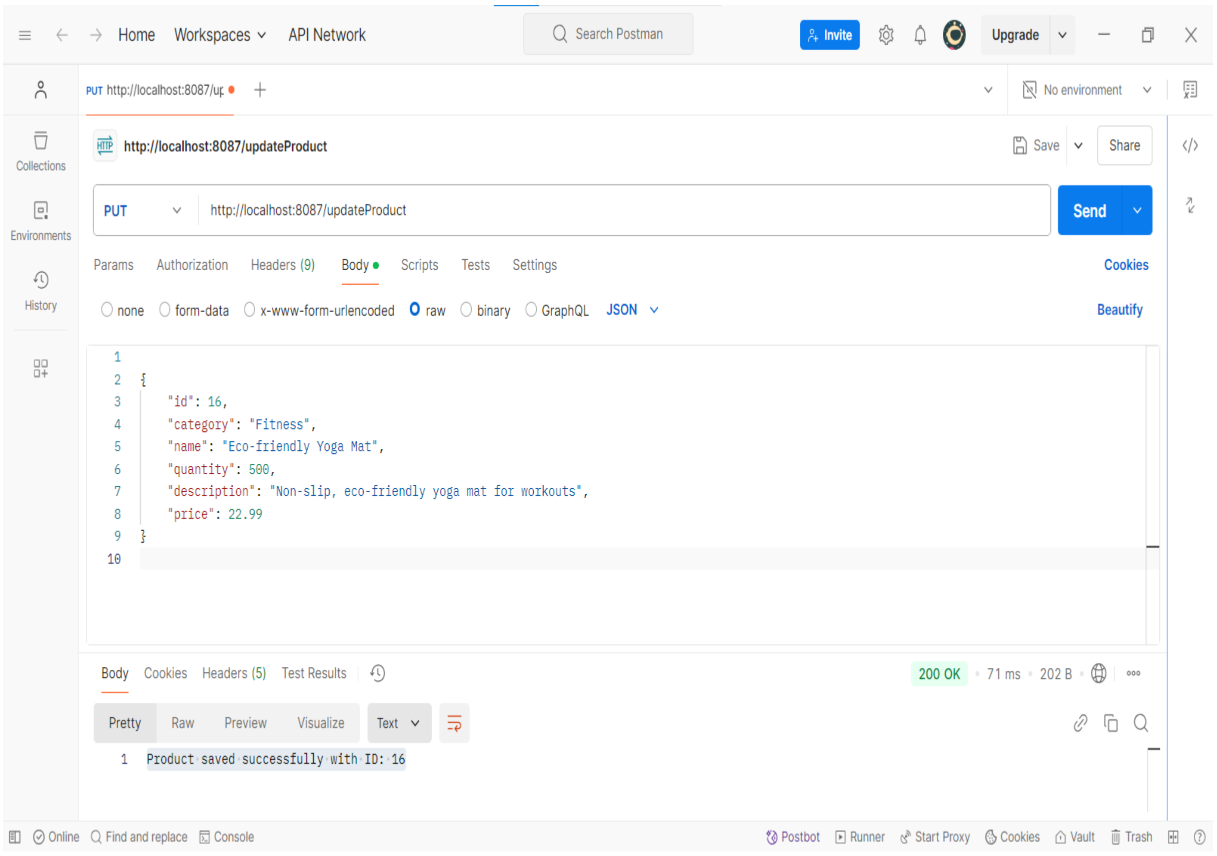
Body: raw JSON

```
{
    "id": 1,
    "category": "Electronics",
    "name": "Smartphone Pro",
    "quantity": 30,
    "description": "Latest model smartphone with advanced features",
    "price": 549.99
}
```

Body Cookies Headers (5) Test Results — 200 OK · 34 ms · 201 B

Text

```
Product saved successfully with ID: 1
```



http://localhost:8087/updateProduct

PUT http://localhost:8087/updateProduct

Body: raw JSON

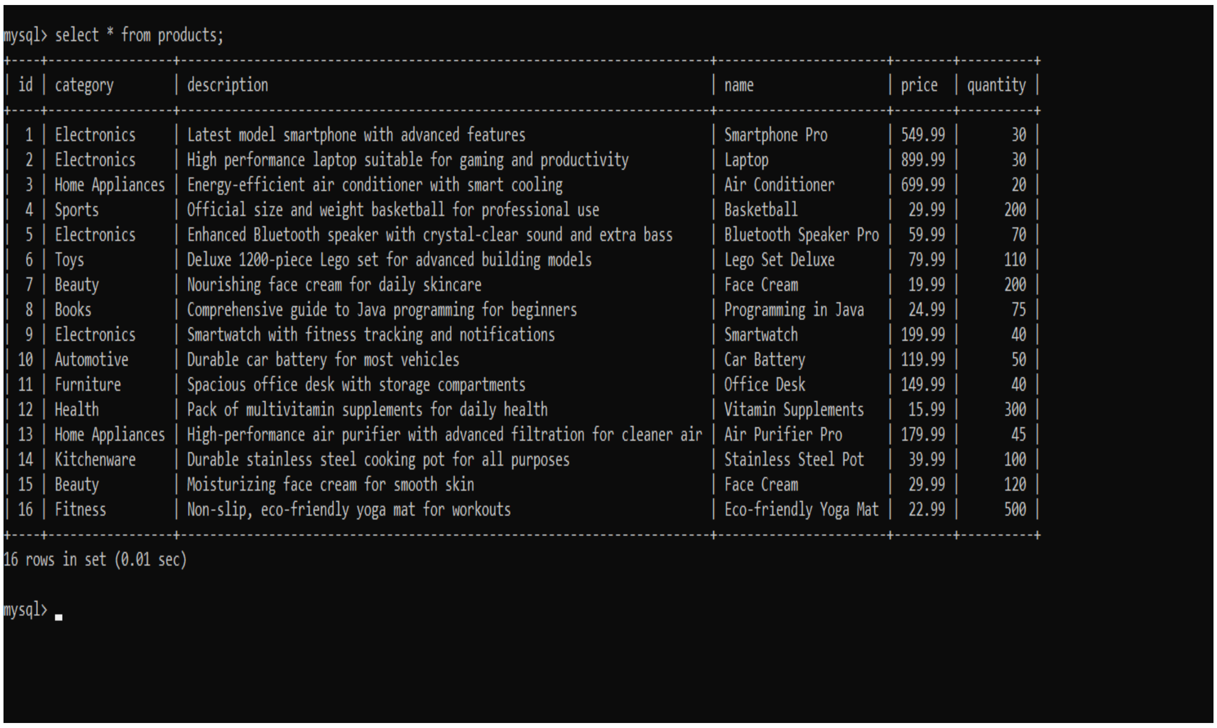
```

{
    "id": 16,
    "category": "Fitness",
    "name": "Eco-friendly Yoga Mat",
    "quantity": 500,
    "description": "Non-slip, eco-friendly yoga mat for workouts",
    "price": 22.99
}
```

Body Cookies Headers (5) Test Results — 200 OK · 71 ms · 202 B

Text

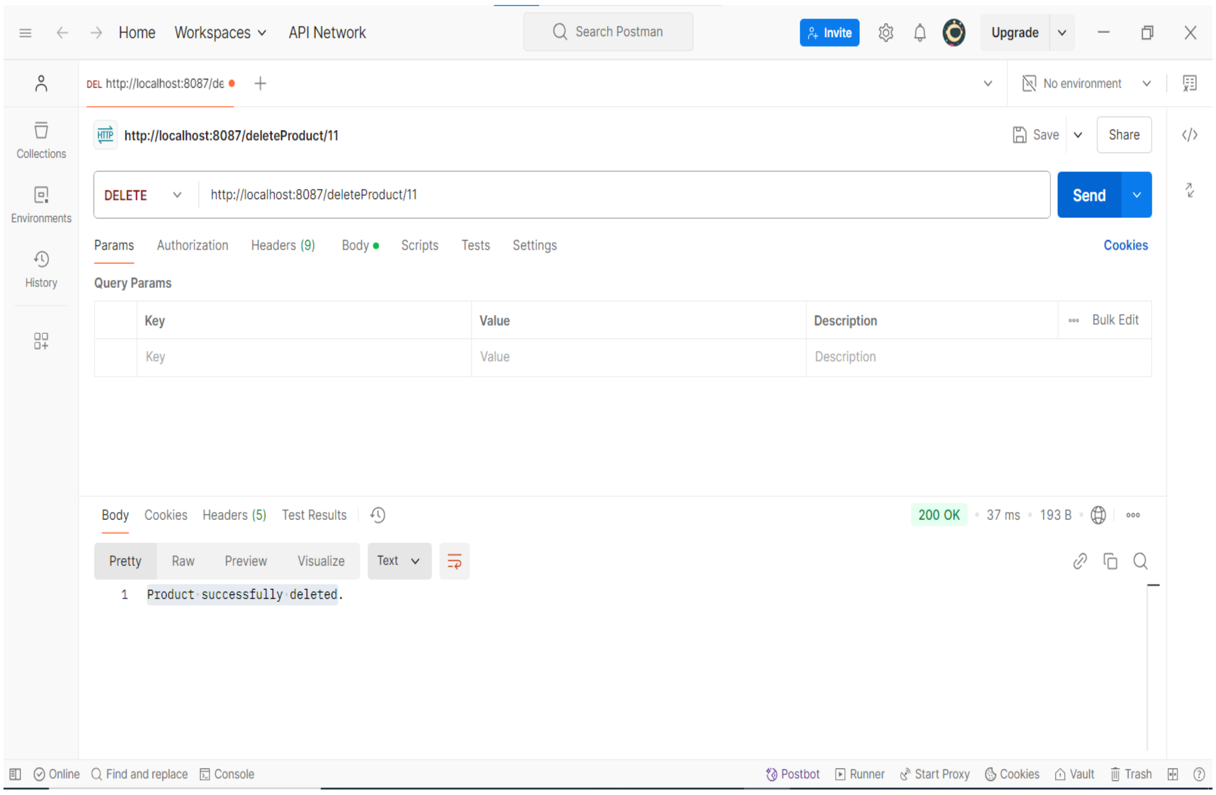
```
Product saved successfully with ID: 16
```

AFTER MODIFICATION THE DATA IN THE TABLE



```
mysql> select * from products;
+----+-----------------+------------------------------------------------------------------------+-----------------------+--------+----------+
| id | category        | description                                                            | name                  | price  | quantity |
+----+-----------------+------------------------------------------------------------------------+-----------------------+--------+----------+
|  1 | Electronics     | Latest model smartphone with advanced features                         | Smartphone Pro        | 549.99 |       30 |
|  2 | Electronics     | High performance laptop suitable for gaming and productivity           | Laptop                | 899.99 |       30 |
|  3 | Home Appliances | Energy-efficient air conditioner with smart cooling                    | Air Conditioner       | 699.99 |       20 |
|  4 | Sports          | Official size and weight basketball for professional use               | Basketball            |  29.99 |      200 |
|  5 | Electronics     | Enhanced Bluetooth speaker with crystal-clear sound and extra bass     | Bluetooth Speaker Pro |  59.99 |       70 |
|  6 | Toys            | Deluxe 1200-piece Lego set for advanced building models                | Lego Set Deluxe       |  79.99 |      110 |
|  7 | Beauty          | Nourishing face cream for daily skincare                               | Face Cream            |  19.99 |      200 |
|  8 | Books           | Comprehensive guide to Java programming for beginners                  | Programming in Java   |  24.99 |       75 |
|  9 | Electronics     | Smartwatch with fitness tracking and notifications                     | Smartwatch            | 199.99 |       40 |
| 10 | Automotive      | Durable car battery for most vehicles                                  | Car Battery           | 119.99 |       50 |
| 11 | Furniture       | Spacious office desk with storage compartments                         | Office Desk           | 149.99 |       40 |
| 12 | Health          | Pack of multivitamin supplements for daily health                      | Vitamin Supplements   |  15.99 |      300 |
| 13 | Home Appliances | High-performance air purifier with advanced filtration for cleaner air | Air Purifier Pro      | 179.99 |       45 |
| 14 | Kitchenware     | Durable stainless steel cooking pot for all purposes                   | Stainless Steel Pot   |  39.99 |      100 |
| 15 | Beauty          | Moisturizing face cream for smooth skin                                | Face Cream            |  29.99 |      120 |
| 16 | Fitness         | Non-slip, eco-friendly yoga mat for workouts                           | Eco-friendly Yoga Mat |  22.99 |      500 |
+----+-----------------+------------------------------------------------------------------------+-----------------------+--------+----------+
16 rows in set (0.01 sec)

mysql> _
```

<u>DELETE METHOD INORDER TO DELETE THE DATA</u>

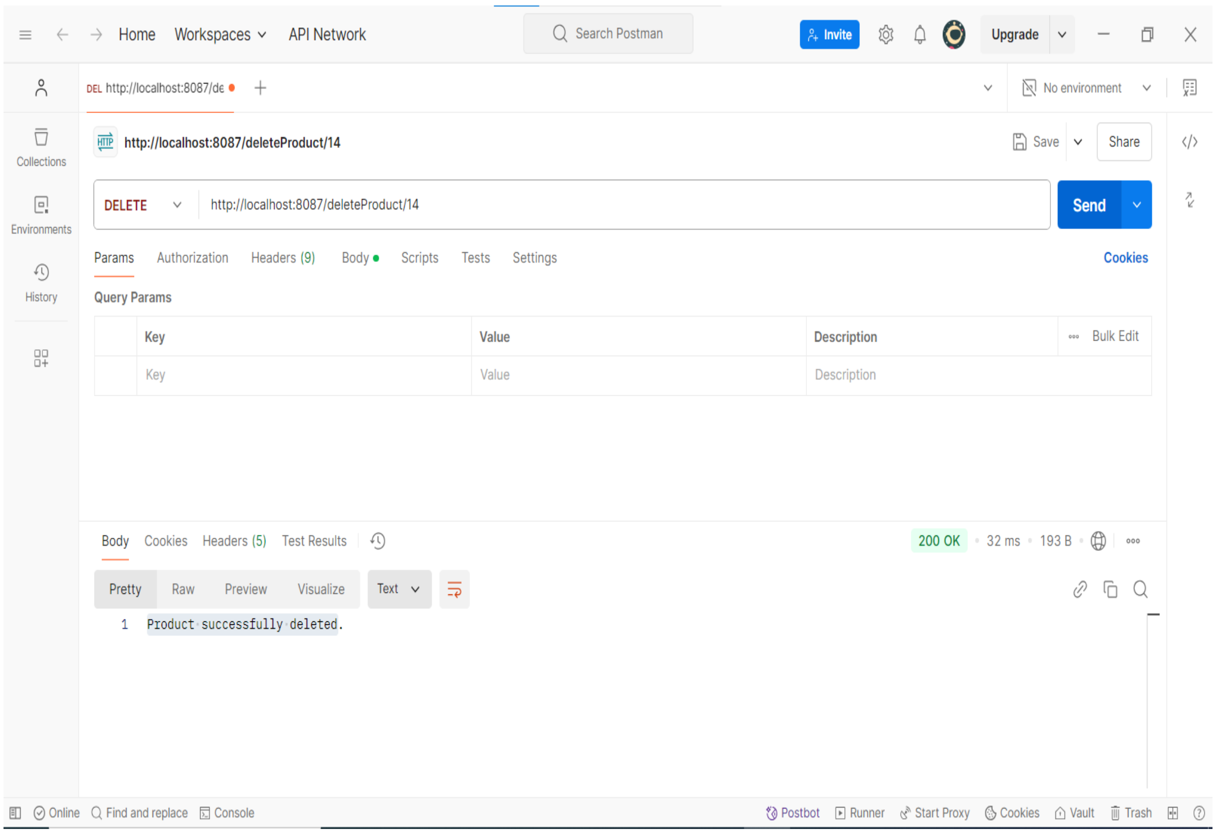


DELETE http://localhost:8087/deleteProduct/11

Body: none

200 OK · 37 ms · 193 B

```
Product successfully deleted.
```



DEL http://localhost:8087/deleteProduct/14

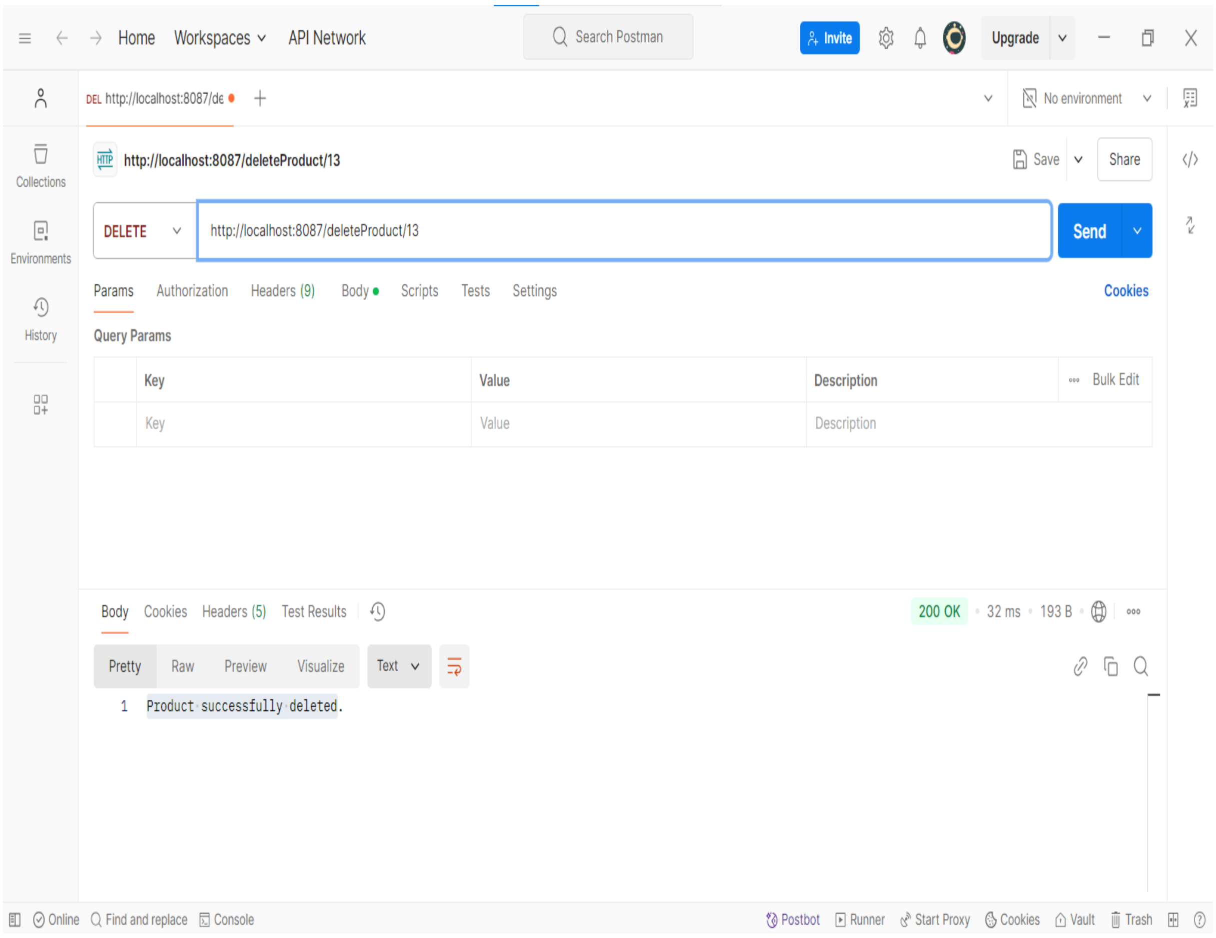
DELETE http://localhost:8087/deleteProduct/14

Query Params

Key	Value	Description
Key	Value	Description

Body — 200 OK · 32 ms · 193 B

```
Product successfully deleted.
```



DEL http://localhost:8087/deleteProduct/13

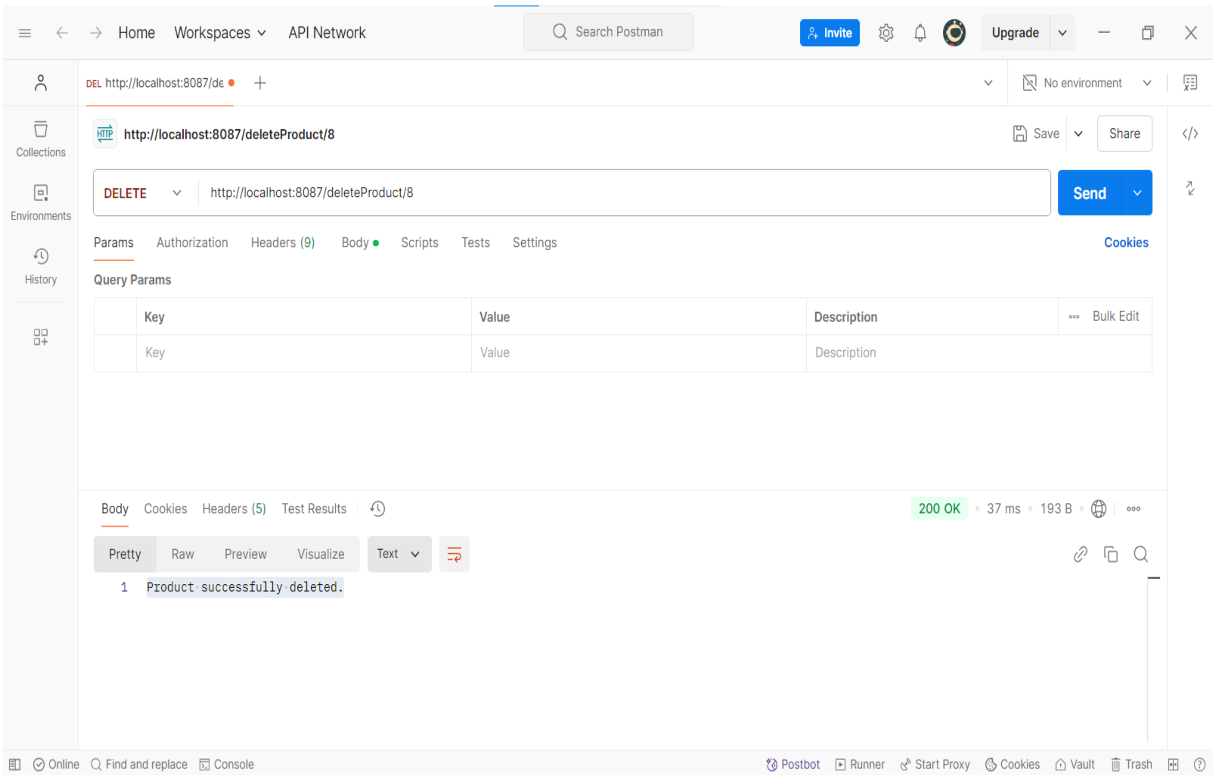
DELETE http://localhost:8087/deleteProduct/13

Query Params

Key	Value	Description
Key	Value	Description

Body — 200 OK · 32 ms · 193 B

```
Product successfully deleted.
```



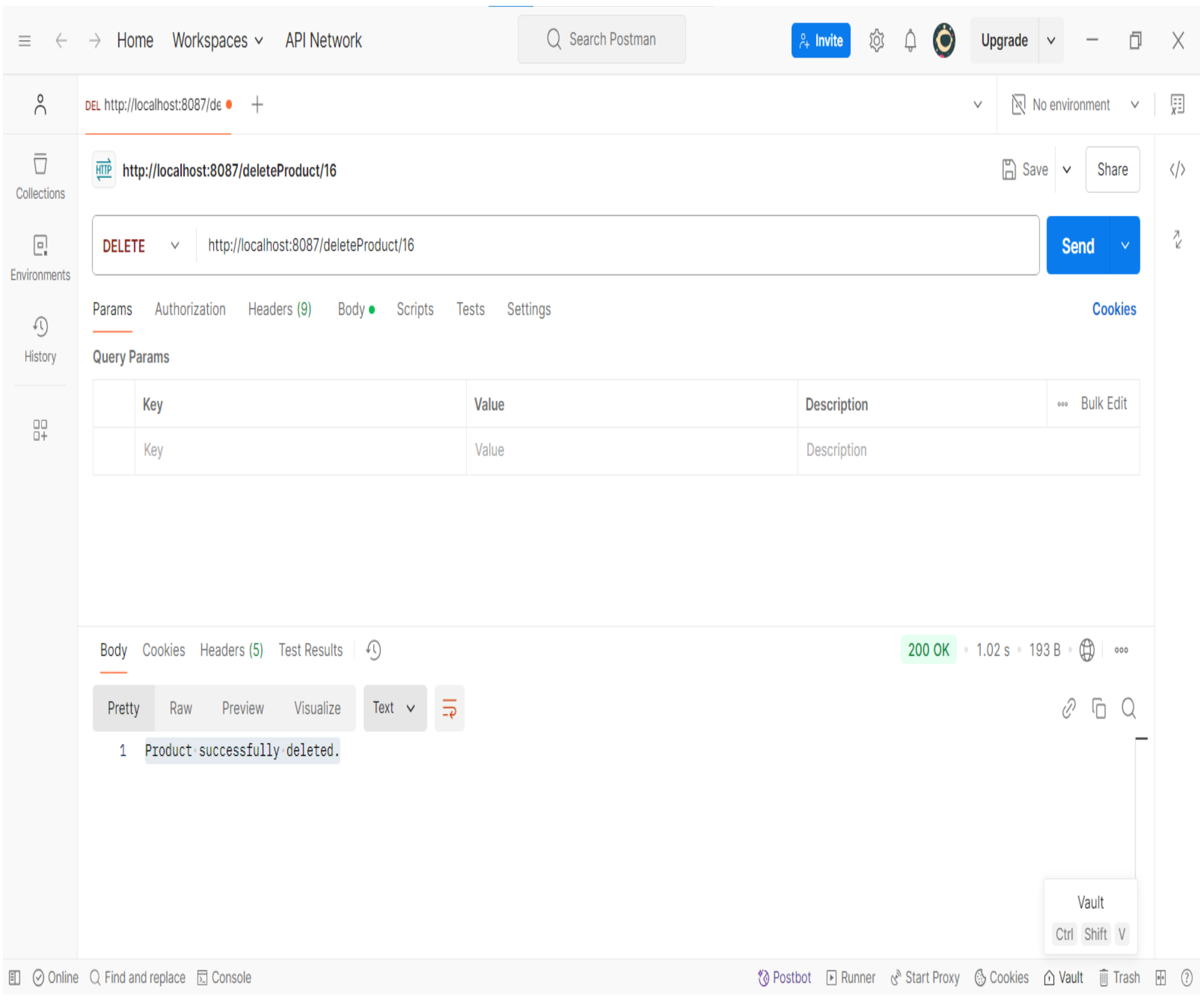
DELETE http://localhost:8087/deleteProduct/8

Query Params

	Key	Value	Description
	Key	Value	Description

200 OK 37 ms 193 B

```
Product successfully deleted.
```



DELETE http://localhost:8087/deleteProduct/16

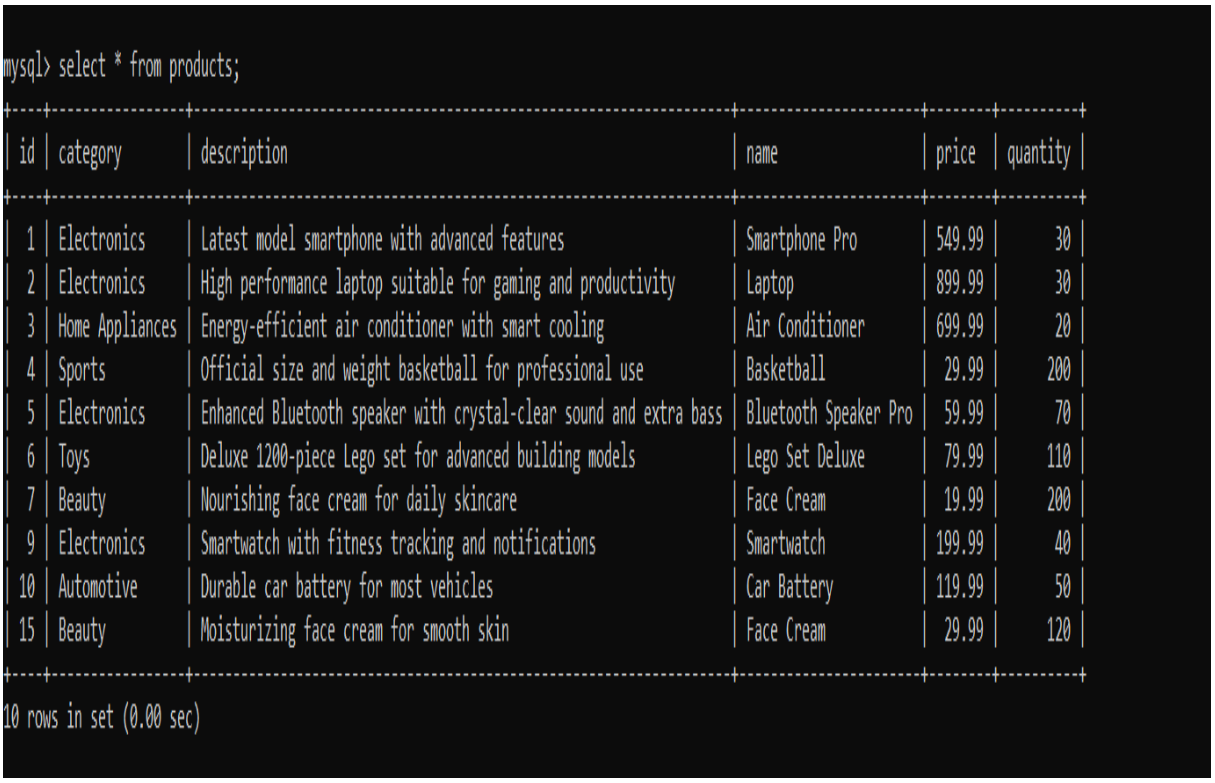
Query Params

	Key	Value	Description
	Key	Value	Description

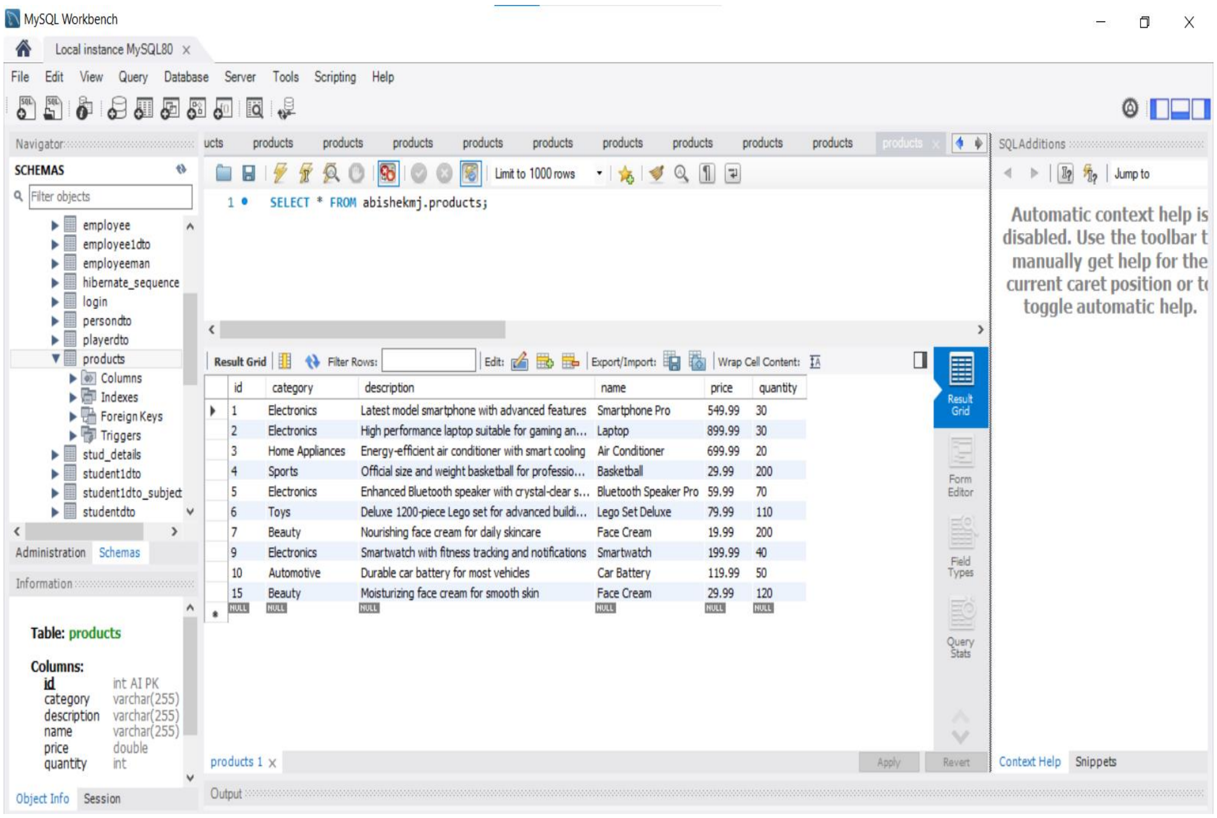
200 OK 1.02 s 193 B

```
Product successfully deleted.
```

AFTER DELETE OPERATION THE DATA IN TABLE



```
mysql> select * from products;
+----+----------------+---------------------------------------------------------------+--------------------+--------+----------+
| id | category       | description                                                   | name               | price  | quantity |
+----+----------------+---------------------------------------------------------------+--------------------+--------+----------+
|  1 | Electronics    | Latest model smartphone with advanced features                | Smartphone Pro     | 549.99 |       30 |
|  2 | Electronics    | High performance laptop suitable for gaming and productivity  | Laptop             | 899.99 |       30 |
|  3 | Home Appliances | Energy-efficient air conditioner with smart cooling          | Air Conditioner    | 699.99 |       20 |
|  4 | Sports         | Official size and weight basketball for professional use      | Basketball         |  29.99 |      200 |
|  5 | Electronics    | Enhanced Bluetooth speaker with crystal-clear sound and extra bass | Bluetooth Speaker Pro |  59.99 |       70 |
|  6 | Toys           | Deluxe 1200-piece Lego set for advanced building models       | Lego Set Deluxe    |  79.99 |      110 |
|  7 | Beauty         | Nourishing face cream for daily skincare                      | Face Cream         |  19.99 |      200 |
|  9 | Electronics    | Smartwatch with fitness tracking and notifications            | Smartwatch         | 199.99 |       40 |
| 10 | Automotive     | Durable car battery for most vehicles                         | Car Battery        | 119.99 |       50 |
| 15 | Beauty         | Moisturizing face cream for smooth skin                       | Face Cream         |  29.99 |      120 |
+----+----------------+---------------------------------------------------------------+--------------------+--------+----------+
10 rows in set (0.00 sec)
```



```
SELECT * FROM abishekmj.products;
```

id	category	description	name	price	quantity
1	Electronics	Latest model smartphone with advanced features	Smartphone Pro	549.99	30
2	Electronics	High performance laptop suitable for gaming an...	Laptop	899.99	30
3	Home Appliances	Energy-efficient air conditioner with smart cooling	Air Conditioner	699.99	20
4	Sports	Official size and weight basketball for professio...	Basketball	29.99	200
5	Electronics	Enhanced Bluetooth speaker with crystal-clear s...	Bluetooth Speaker Pro	59.99	70
6	Toys	Deluxe 1200-piece Lego set for advanced buildi...	Lego Set Deluxe	79.99	110
7	Beauty	Nourishing face cream for daily skincare	Face Cream	19.99	200
9	Electronics	Smartwatch with fitness tracking and notifications	Smartwatch	199.99	40
10	Automotive	Durable car battery for most vehicles	Car Battery	119.99	50
15	Beauty	Moisturizing face cream for smooth skin	Face Cream	29.99	120
NULL	NULL	NULL	NULL	NULL	NULL

Table: products

Columns:

id	int AI PK
category	varchar(255)
description	varchar(255)
name	varchar(255)
price	double
quantity	int