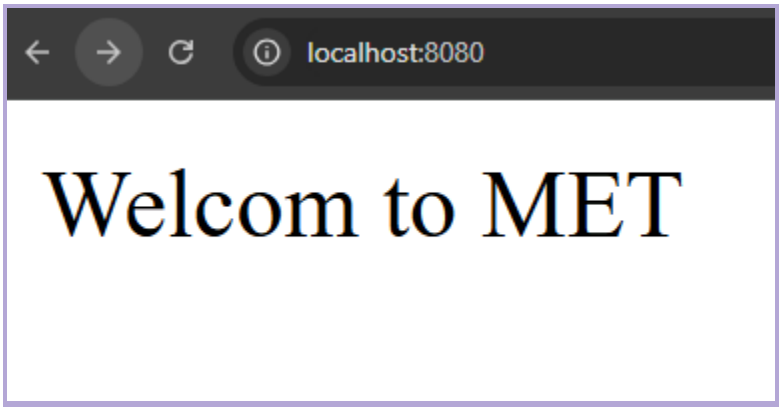
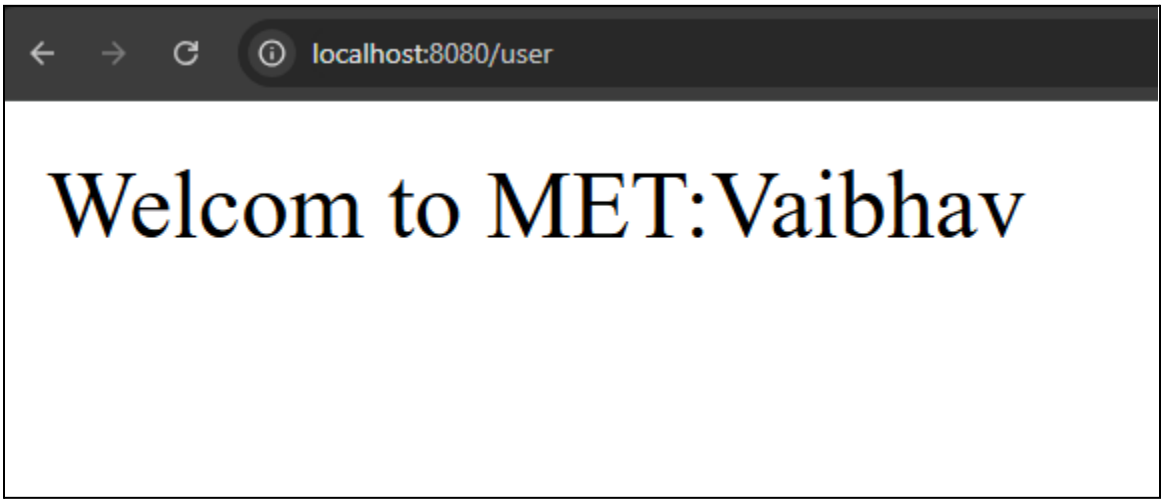
Program No:	**24**
Roll No :	**1524**
Title of Program :	**Spring Boot and RESTful Web Services**
Objective :	**1.Write a program to create a simple Spring Boot application that prints a message. 2.Write a program to demonstrate Database Connection with spring boot.**

Source Code:
1.Write a program to create a simple Spring Boot application that prints a message.
GreetingController.java

```
package edu.met.p1;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController

public class GreetingController {
	@GetMapping("/")
	public String welcomeMeassage()
	{
		return "<html><body>Welcom to MET</body></html>";
	}

	@GetMapping("/user")
	public String welcomeMeassage1()
	{
		return "<html><body>Welcom to MET:Vaibhav</body></html>";
	}
}
```

OUTPUT:


localhost:8080
Welcom to MET


localhost:8080/user
Welcom to MET:Vaibhav

2.Write a program to demonstrate Database Connection with spring boot.

Product.java

```
package edu.met.p1;

public class Product {
	int pid;
	String pname;
	int price;
	public int getPid() {
		return pid;
	}
	public void setPid(int pid) {
		this.pid = pid;
	}
	public String getPname() {
		return pname;
	}
	public void setPname(String pname) {
		this.pname = pname;
	}
	public int getPrice() {
		return price;
	}
	public void setPrice(int price) {
		this.price = price;
	}
	public Product(int pid, String pname, int price) {
		super();
		this.pid = pid;
		this.pname = pname;
		this.price = price;
	}
	public Product() {
		super();
		// TODO Auto-generated constructor stub
	}


}
```

ProductRowMapper.java

```
package edu.met.p1;

import java.sql.ResultSet;
import java.sql.SQLException;

import org.springframework.jdbc.core.RowMapper;

public class ProductRowMapper implements RowMapper<Product> {

	@Override
	public Product mapRow(ResultSet rs, int rowNum) throws SQLException {
		// TODO Auto-generated method stub
		Product p1=new Product();
		p1.setPid(rs.getInt(1));
		p1.setPname(rs.getString(2));
		p1.setPrice(rs.getInt(3));
		return p1;
	}

}
```

ProductController.java

```
package edu.met.p1;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.bind.annotation.RestController;

import org.springframework.web.bind.annotation.RequestMethod;

@Controller
@RestController
public class ProductController {
	@Autowired
	ProductDao pd;
	@GetMapping("/product")
	public List<Product> getALLProducts(){
```

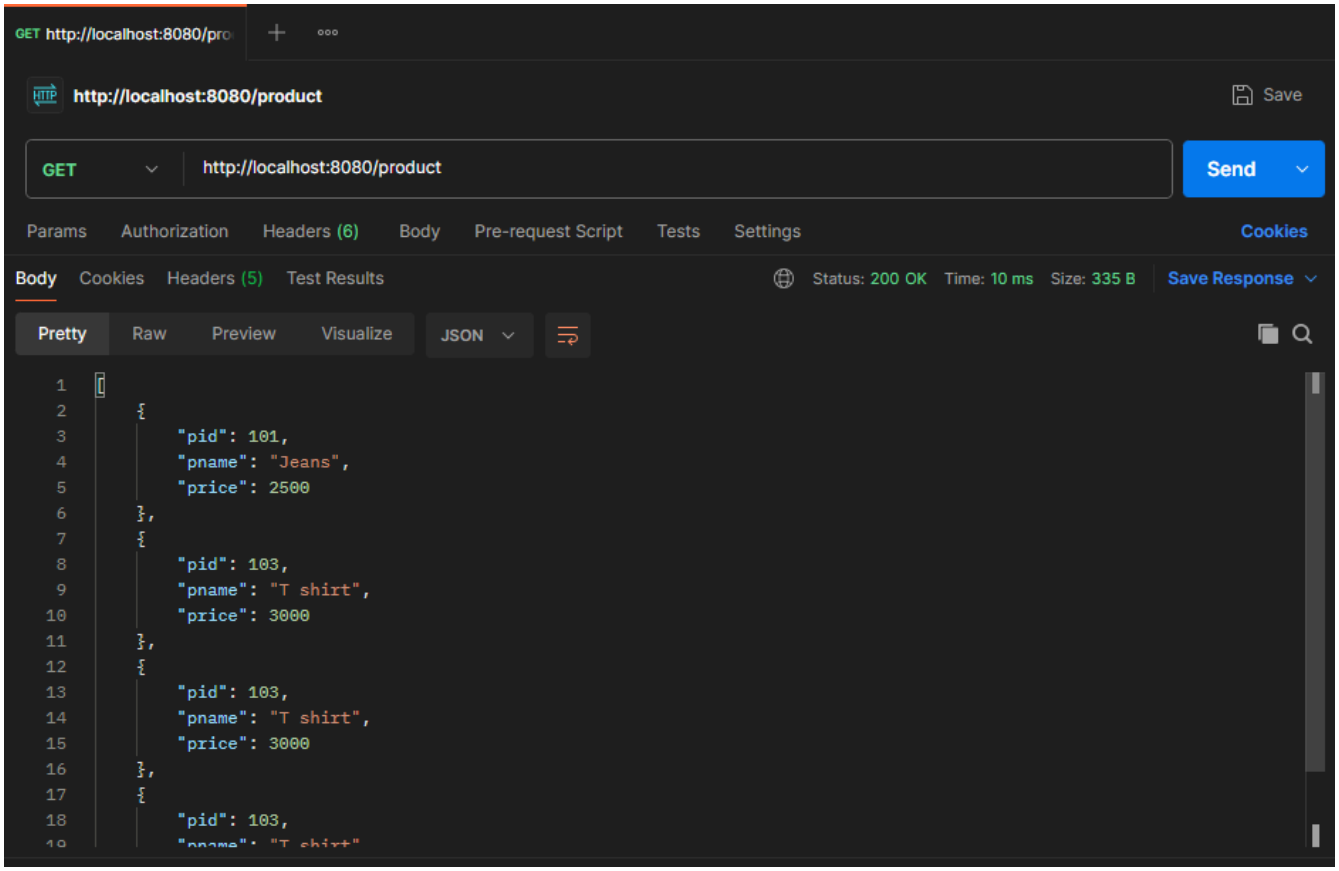
```
                return pd.getAll();
        }
        @RequestMapping(value="/product/{id}",method = RequestMethod.GET)
        public @ResponseBody List<Product> getById(@PathVariable("id")String id)
        {
                return pd.getById(id);
        }
        @RequestMapping(value="/product/del/{id}",method = RequestMethod.DELETE)
        public @ResponseBody int delById(@PathVariable("id")String id)
        {
                return pd.delById(id);
        }

}
```

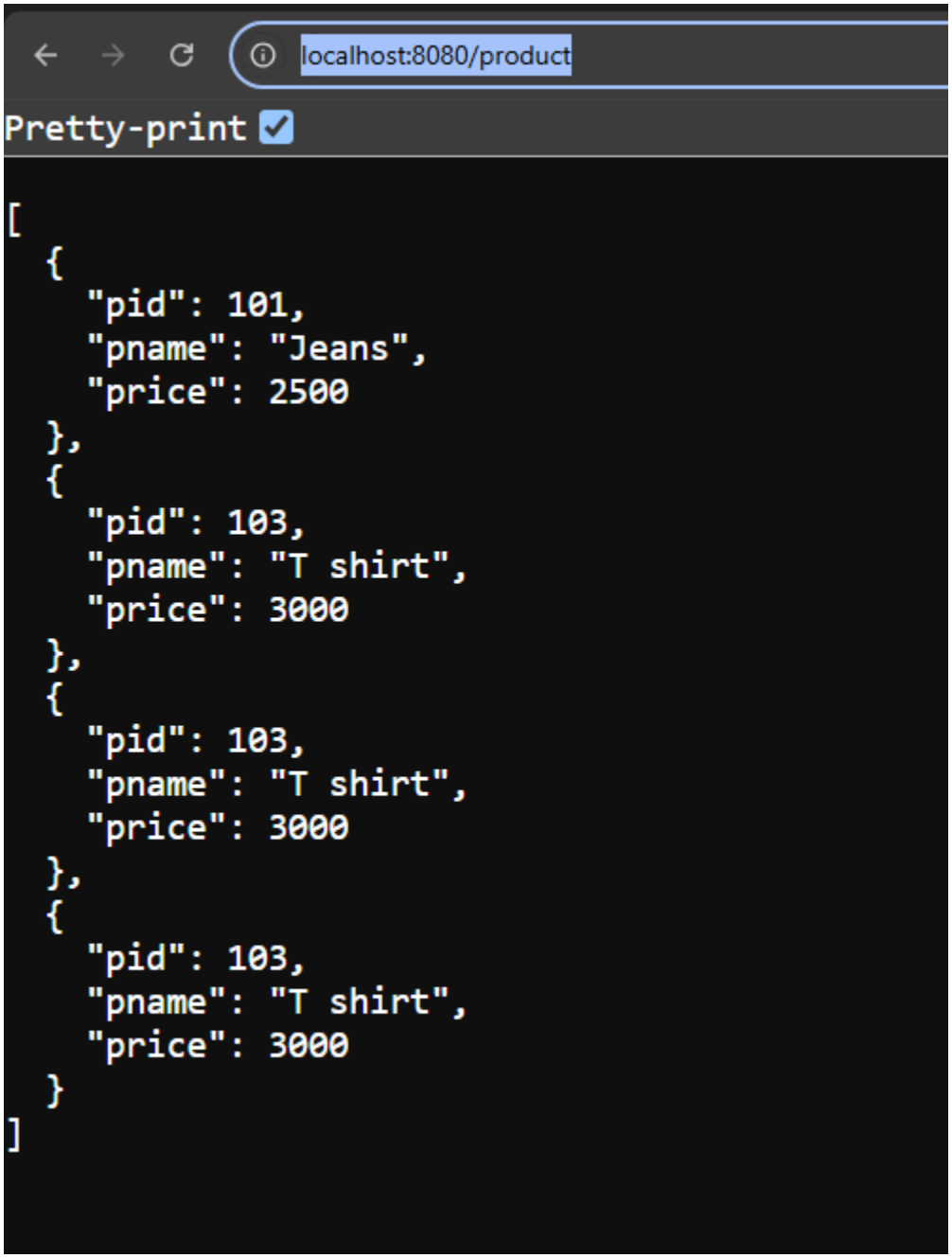
ProductDao.java

```
package edu.met.p1;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.jdbc.core.JdbcTemplate;
import org.springframework.stereotype.Repository;

@Repository
public class ProductDao {
        @Autowired
        JdbcTemplate jdbcT;
        //fetch all rows
        public List<Product> getAll()
        {
                String sql="select * from products";
                return jdbcT.query(sql, new ProductRowMapper());
        }

        public List<Product> getById(String id)
        {
                String sql="select * from products where pid="+Integer.parseInt(id);
                return jdbcT.query(sql, new ProductRowMapper());
        }
```

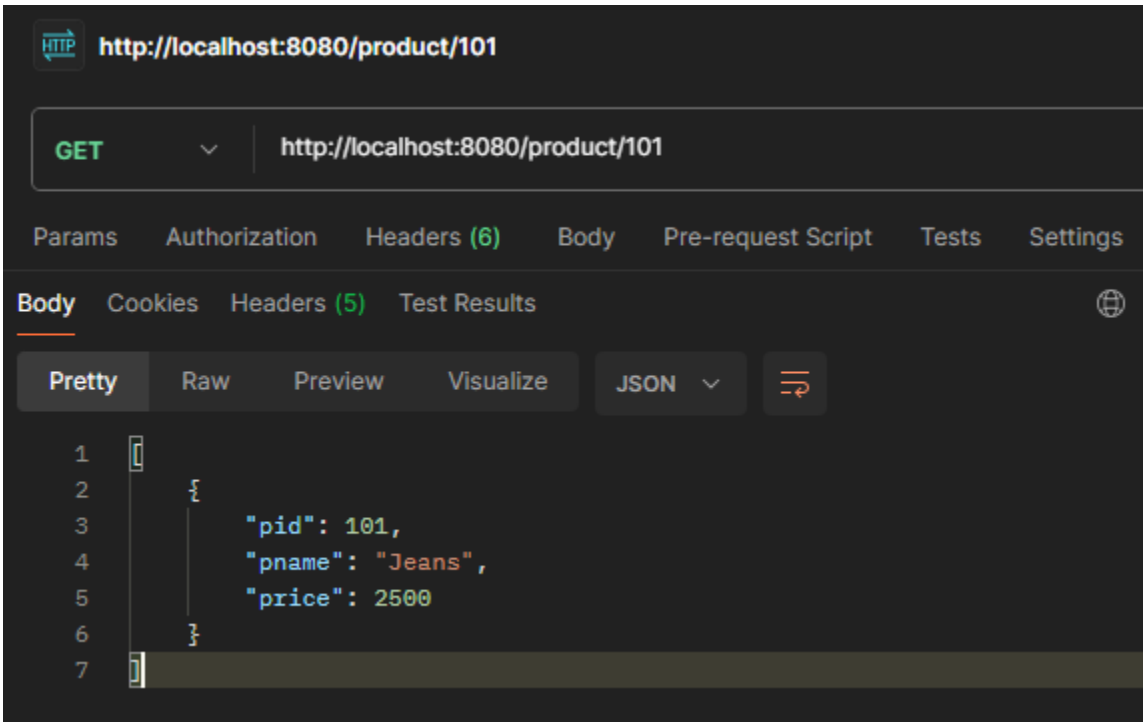
```
	public int delById(String id)
	{
		String sql="delete from products where pid="+Integer.parseInt(id);
		return jdbcT.update(sql);
	}


}
```

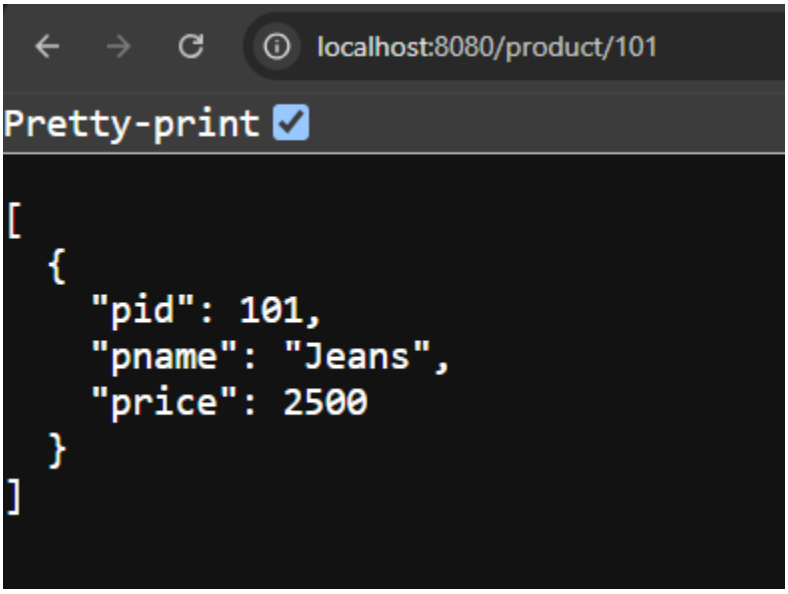
OUTPUT:


GET http://localhost:8080/pro
http://localhost:8080/product
Save
GET
http://localhost:8080/product
Send
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Cookies
Body
Cookies
Headers (5)
Test Results
Status: 200 OK
Time: 10 ms
Size: 335 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
[
{
"pid": 101,
"pname": "Jeans",
"price": 2500
},
{
"pid": 103,
"pname": "T shirt",
"price": 3000
},
{
"pid": 103,
"pname": "T shirt",
"price": 3000
},
{
"pid": 103,

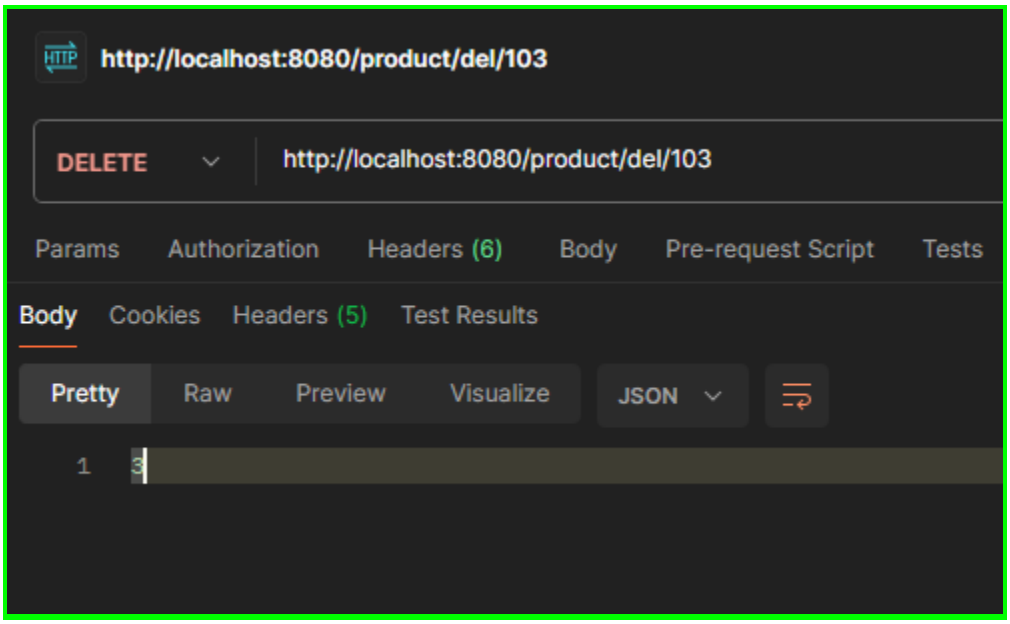

localhost:8080/product
Pretty-print
[
{
"pid": 101,
"pname": "Jeans",
"price": 2500
},
{
"pid": 103,
"pname": "T shirt",
"price": 3000
},
{
"pid": 103,
"pname": "T shirt",
"price": 3000
},
{
"pid": 103,
"pname": "T shirt",
"price": 3000
}
]

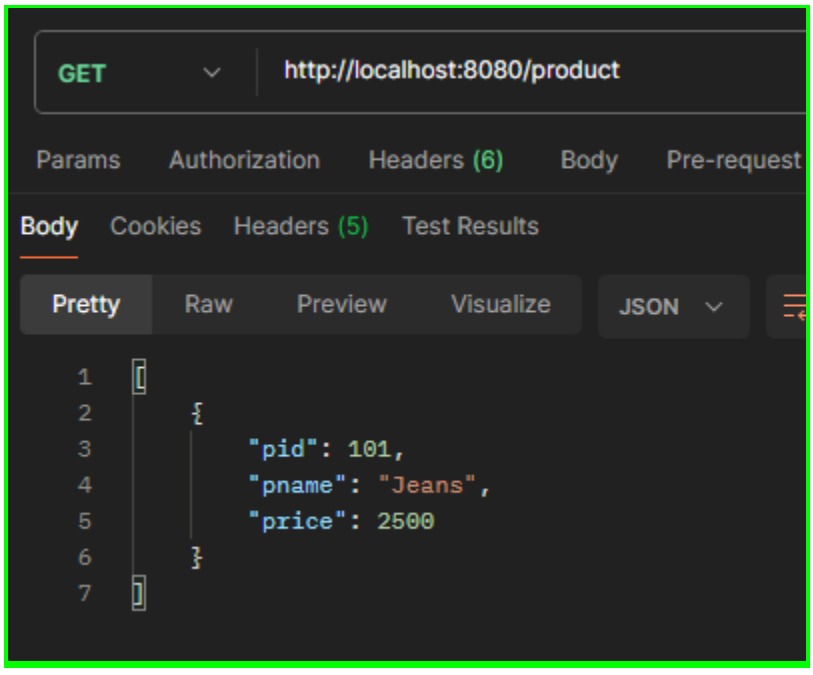
GET BY ID


http://localhost:8080/product/101
GET
http://localhost:8080/product/101
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Settings
Body
Cookies
Headers (5)
Test Results
Pretty
Raw
Preview
Visualize
JSON
[
{
"pid": 101,
"pname": "Jeans",
"price": 2500
}
]


localhost:8080/product/101
Pretty-print
[
{
"pid": 101,
"pname": "Jeans",
"price": 2500
}
]

DELETE BY ID


http://localhost:8080/product/del/103
DELETE
http://localhost:8080/product/del/103
Params
Authorization
Headers (6)
Body
Pre-request Script
Tests
Body
Cookies
Headers (5)
Test Results
Pretty
Raw
Preview
Visualize
JSON
1
3


GET
http://localhost:8080/product
Params
Authorization
Headers (6)
Body
Pre-request
Body
Cookies
Headers (5)
Test Results
Pretty
Raw
Preview
Visualize
JSON
1 [
2 {
3 "pid": 101,
4 "pname": "Jeans",
5 "price": 2500
6 }
7]