

# Nimap Machine Test

**Aim:** Implement One to many relationships (Category and Products) tables and perform CRUD operation.

Technology used in project are as follows.

**Programming language:** Java

**Database:** Mysql

**Web framework:** Spring boot.

**ORM framework:** Hibernate

**Software for testing:** Postman API

**//Execution of Project With certain Inputs and Outputs.**

- Creation of Database Detailing.

```
mysql> create database detailing;
Query OK, 1 row affected (0.01 sec)

mysql> use detailing;
Database changed
mysql> _
```

- After Executing the Spring boot Project We will get the Tables as below:-

```
mysql> show tables;
+-----+
| Tables_in_detailing |
+-----+
| category             |
| hibernate_sequence   |
| product              |
+-----+
3 rows in set (0.00 sec)
```

- Description of Table Category and Project

```
mysql> desc category;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id     | int           | NO   | PRI | NULL    |       |
| name   | varchar(255)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql> desc product;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| pid            | int           | NO   | PRI | NULL    |       |
| price          | int           | NO   |     | NULL    |       |
| product_name   | varchar(255)  | YES  |     | NULL    |       |
| qty            | int           | NO   |     | NULL    |       |
| foreign_key    | int           | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

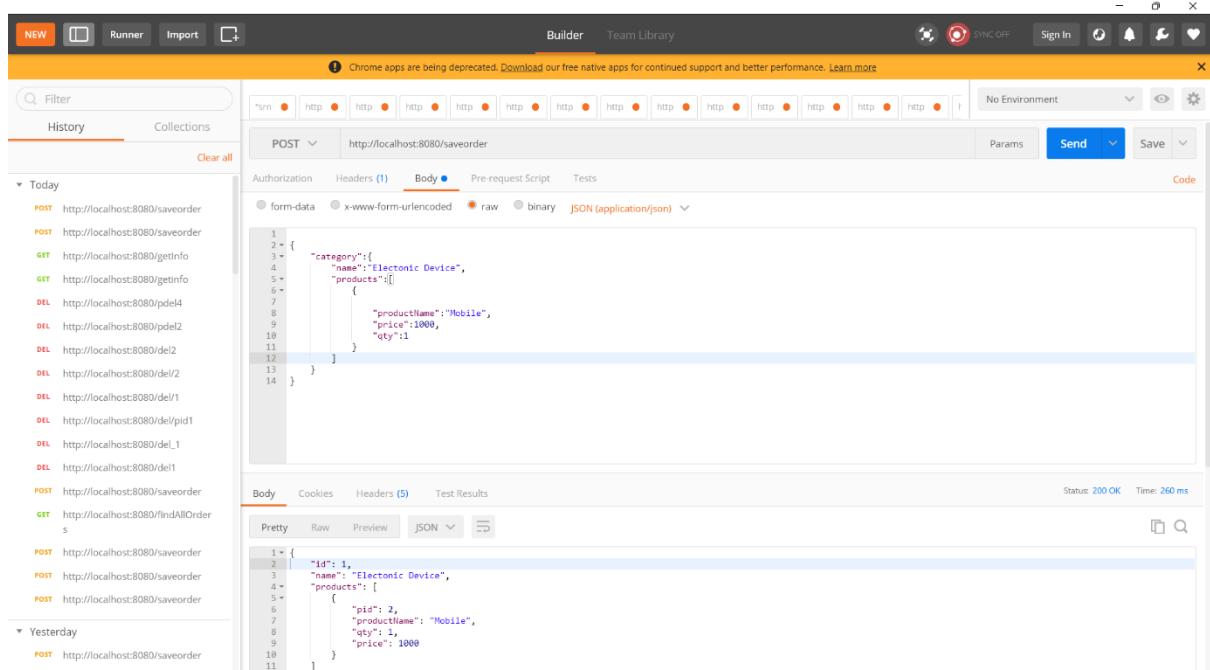
mysql>
```

## //CURD Operations.

1.Post Method:-Inserting the data to Database Detailing.

URL used:- `http://localhost:8080/saveorder`

- JSON Code With Input and its Output:



- Database Before and After Post Method:-

```
mysql> select * from category;
Empty set (0.00 sec)

mysql> select * from product;
Empty set (0.00 sec)

mysql> select * from category;
+-----+-----+
| id | name          |
+-----+-----+
| 1 | Electronic Device |
+-----+-----+
1 row in set (0.00 sec)

mysql> select * from product;
+-----+-----+-----+-----+-----+
| pid | price | product_name | qty | foreign_key |
+-----+-----+-----+-----+-----+
| 2 | 1000 | Mobile      | 1 | 1 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

- After Posting multiple times:-

```
MySQL 8.0 Command Line Client

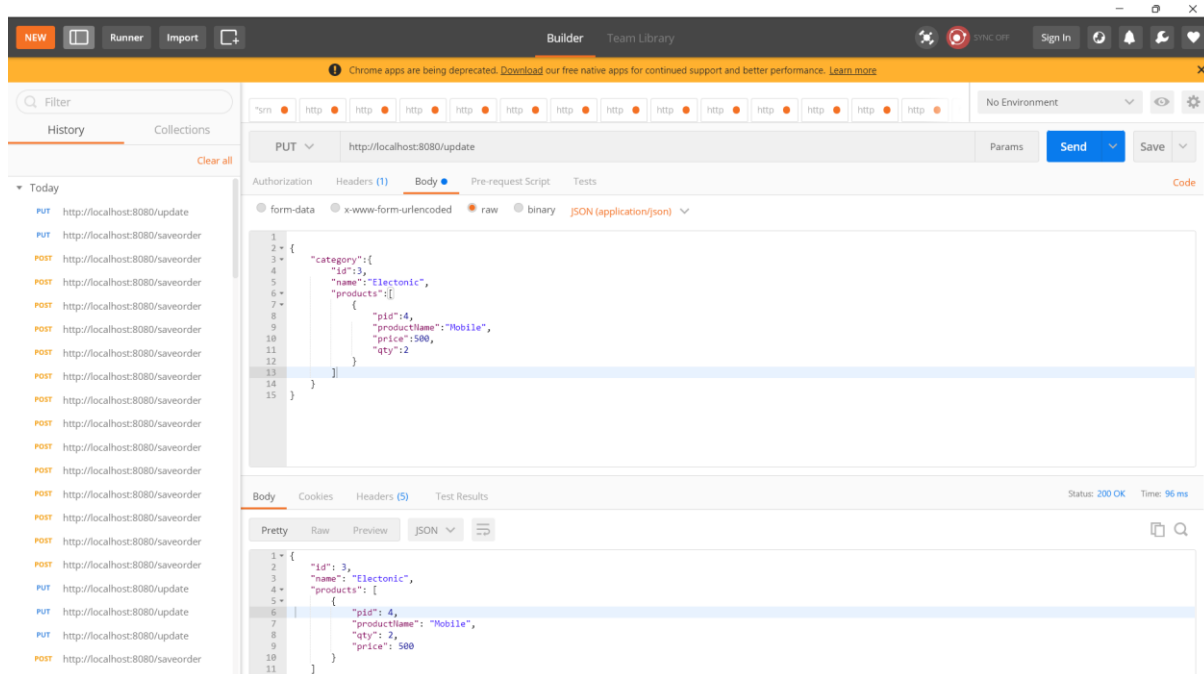
mysql> select * from category;
+-----+-----+
| id | name          |
+-----+-----+
| 1 | Electronic Device |
| 3 | Electronic Device |
| 5 | Electronic Device |
| 7 | Electronic Device |
| 9 | Electronic Device |
| 11 | Electronic Device |
| 13 | Electronic Device |
+-----+-----+
7 rows in set (0.00 sec)

mysql> select * from product;
+-----+-----+-----+-----+-----+
| pid | price | product_name | qty | foreign_key |
+-----+-----+-----+-----+-----+
| 2 | 1000 | Laptop      | 1 | 1 |
| 4 | 1000 | Laptop      | 1 | 3 |
| 6 | 1000 | Laptop      | 1 | 5 |
| 8 | 1000 | Laptop      | 1 | 7 |
| 10 | 1000 | Laptop      | 1 | 9 |
| 12 | 1000 | Laptop      | 1 | 11 |
| 14 | 1000 | Laptop      | 1 | 13 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

## 2.Put Method:-Updating Value using the JSON code Below Image.

URL used:- `http://localhost:8080/update`



- Database After Execution of above Command.

### Change in the Category And Product table.

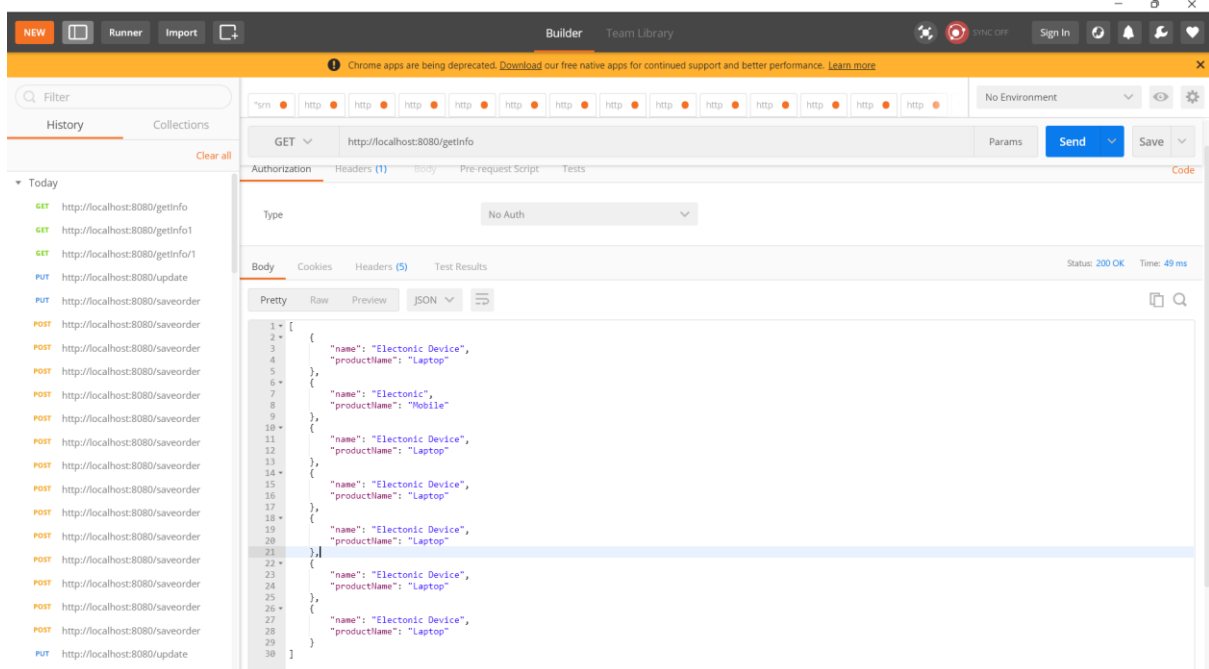
id=3 for category and pid=4 for product.

```
MySQL 8.0 Command Line Client
mysql> select * from category;
+----+-----+
| id | name      |
+----+-----+
| 1  | Electronic |
| 3  | Electronic |
| 5  | Electronic |
| 7  | Electronic |
| 9  | Electronic |
| 11 | Electronic |
| 13 | Electronic |
+----+-----+
7 rows in set (0.00 sec)

mysql> select * from product;
+----+-----+-----+-----+-----+
| pid | price | product_name | qty | foreign_key |
+----+-----+-----+-----+-----+
| 2   | 1000  | Laptop       | 1   | 1           |
| 4   | 500   | Mobile       | 2   | 3           |
| 6   | 1000  | Laptop       | 1   | 5           |
| 8   | 1000  | Laptop       | 1   | 7           |
| 10  | 1000  | Laptop       | 1   | 9           |
| 12  | 1000  | Laptop       | 1   | 11          |
| 14  | 1000  | Laptop       | 1   | 13          |
+----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

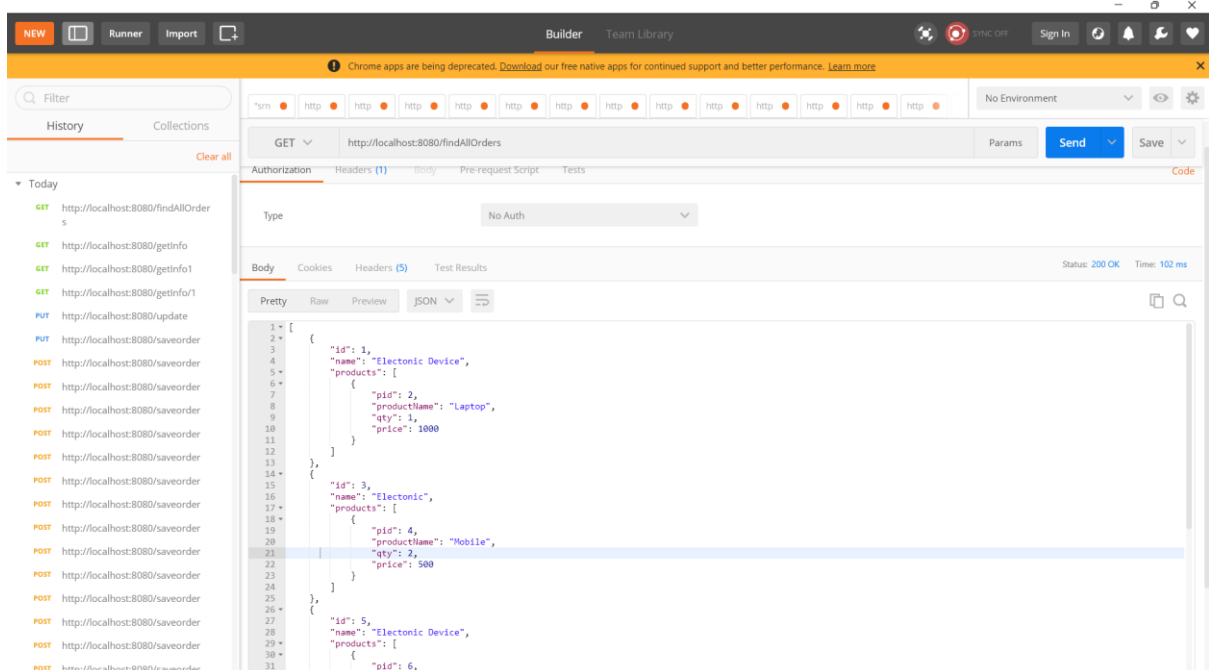
### 3.Get Method:-Reading the data from Database Detailing.

URL used:- `http://localhost:8080/getInfo`



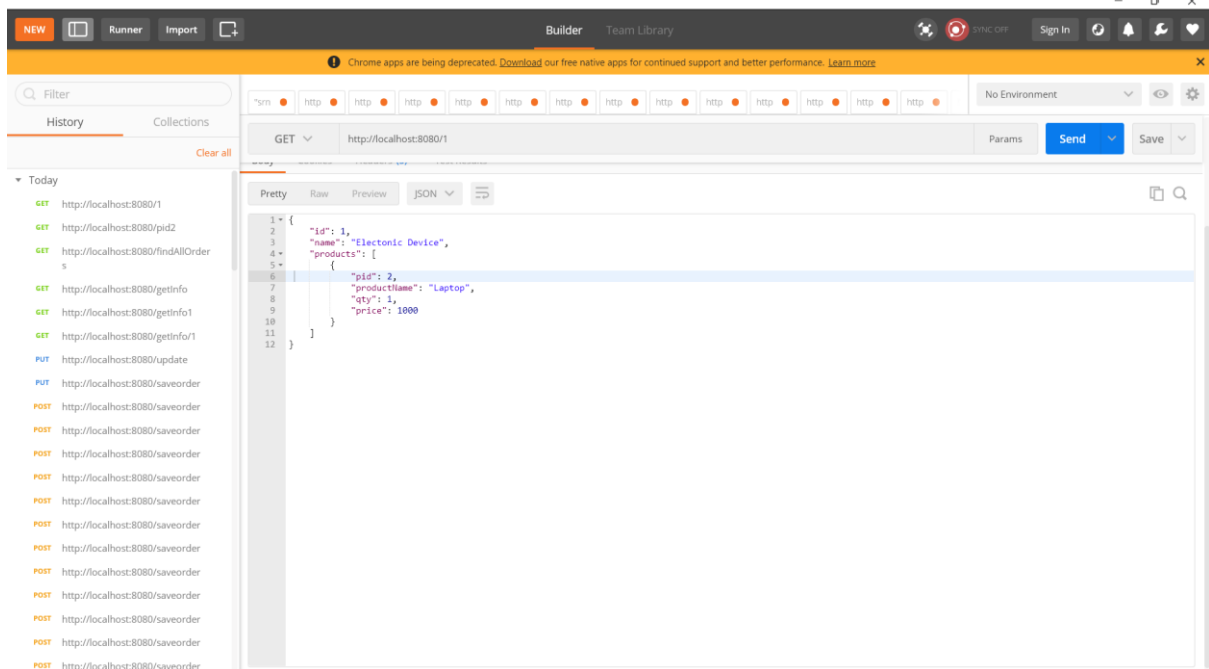
- **findAllOrders**

URL used:- `http://localhost:8080/findAllOrders`

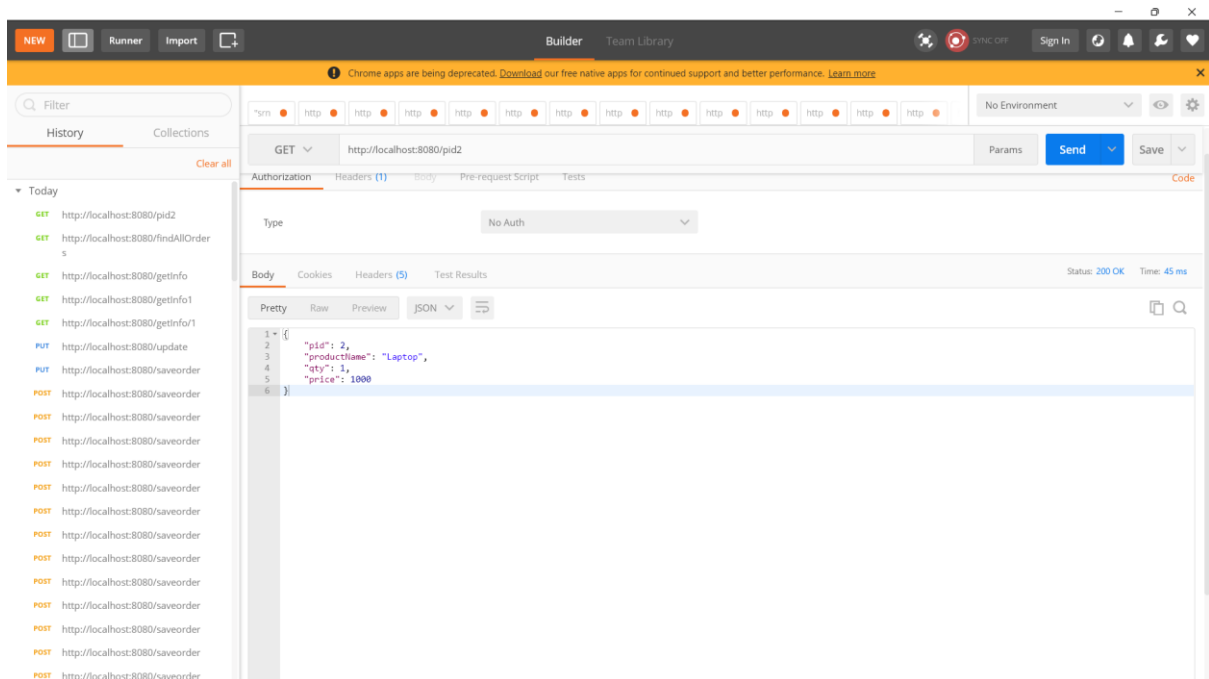


- **Get values By Category Id**

URI used:- `http://localhost:8080/1`



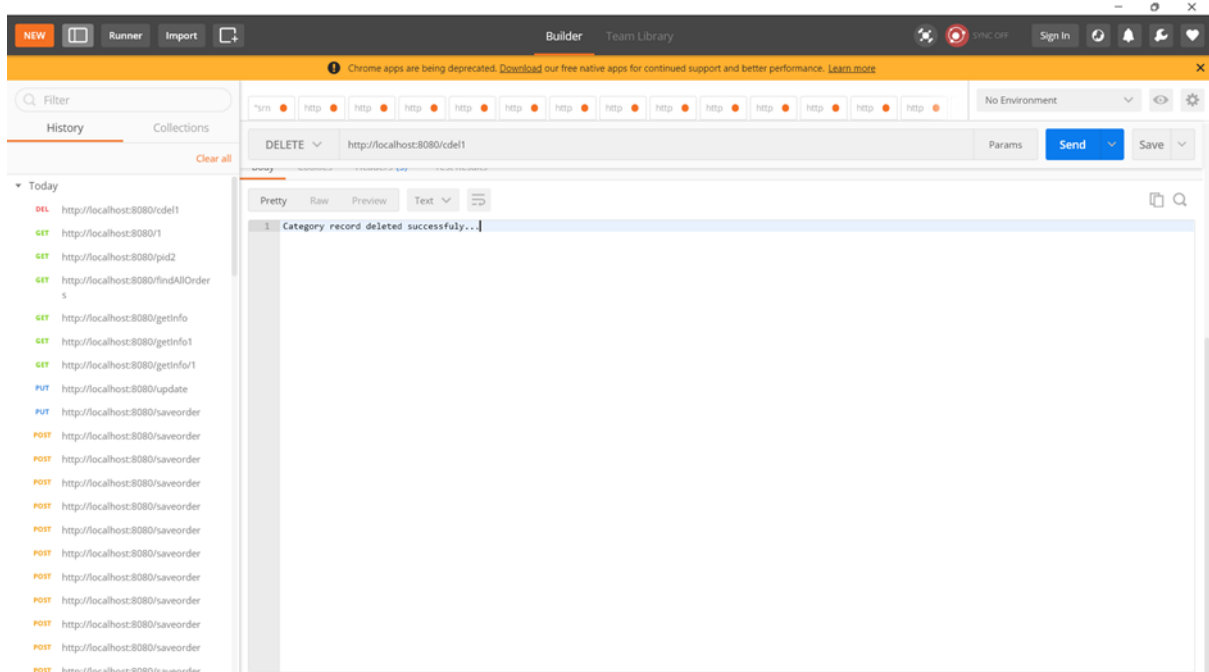
- **Get values By Product Id**
- **URL used:- `http://localhost:8080/pid2`**



#### 4.Delete Method:-Deleting the data From Database Detailing.

- Delete by category

URL used:- <http://localhost:8080/cdel1>



- Before delete and After deleting

MySQL 8.0 Command Line Client

```
mysql> select * from category;
+----+-----+
| id | name       |
+----+-----+
| 1  | Electronic Device |
| 3  | Electronic   |
| 5  | Electronic Device |
| 7  | Electronic Device |
| 9  | Electronic Device |
| 11 | Electronic Device |
| 13 | Electronic Device |
+----+-----+
7 rows in set (0.00 sec)
```

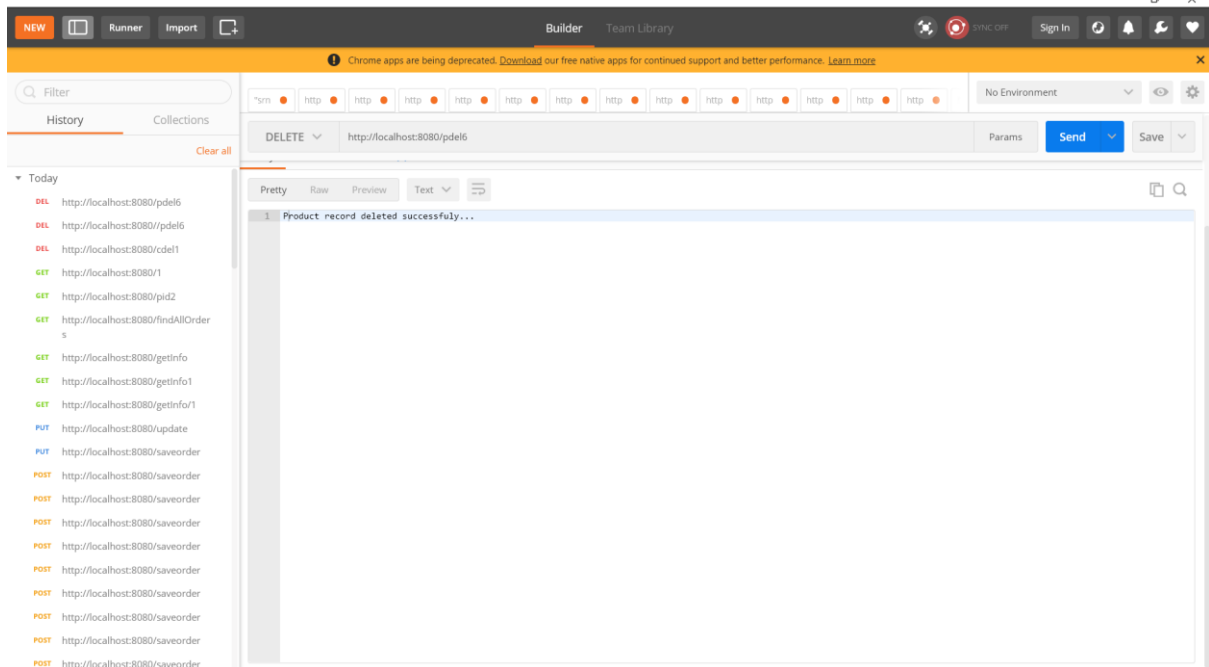
MySQL 8.0 Command Line Client

```
7 rows in set (0.00 sec)

mysql> select * from category;
+----+-----+
| id | name       |
+----+-----+
| 3  | Electronic   |
| 5  | Electronic Device |
| 7  | Electronic Device |
| 9  | Electronic Device |
| 11 | Electronic Device |
| 13 | Electronic Device |
+----+-----+
```

- Delete by product

URL used:- <http://localhost:8080/pdel6>



Before

```
mysql> select * from product;
+----+-----+-----+-----+-----+
| pid | price | product_name | qty | foreign_key |
+----+-----+-----+-----+-----+
| 4   | 500   | Mobile       | 2   | 3           |
| 6   | 1000  | Laptop       | 1   | 5           |
| 8   | 1000  | Laptop       | 1   | 7           |
| 10  | 1000  | Laptop       | 1   | 9           |
| 12  | 1000  | Laptop       | 1   | 11          |
| 14  | 1000  | Laptop       | 1   | 13          |
+----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>
```

After

```
mysql> select * from product;
+----+-----+-----+-----+-----+
| pid | price | product_name | qty | foreign_key |
+----+-----+-----+-----+-----+
| 4   | 500   | Mobile       | 2   | 3           |
| 8   | 1000  | Laptop       | 1   | 7           |
| 10  | 1000  | Laptop       | 1   | 9           |
| 12  | 1000  | Laptop       | 1   | 11          |
| 14  | 1000  | Laptop       | 1   | 13          |
+----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
```

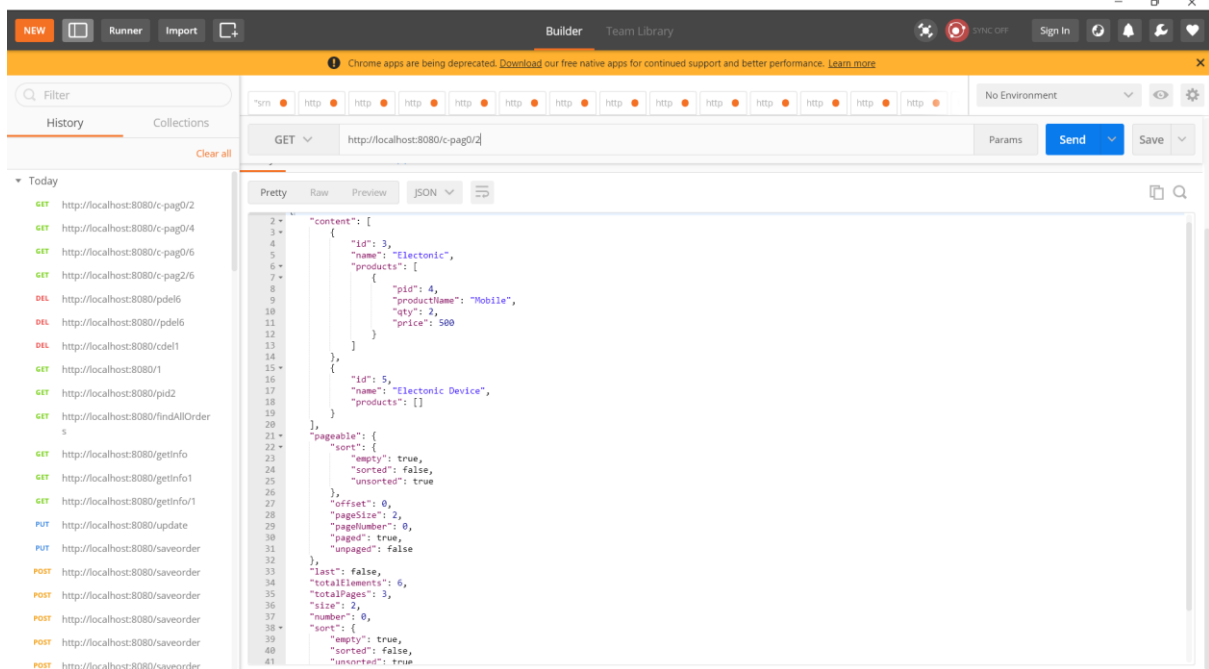


- **Pagination**

### **By category**

URL used :-http://localhost:8080/c-pag0/2

-It Gives first 2 values by category ID.



### **By product**

URL used:-http://localhost:8080/c-pag0/2

-It Gives the values of first 2 product pld in database.

