Using the previously created Orders and Product classes, create a many-to-many mapping between them.

# Code

# Orders.java

```java
1  package com.ProductRestApi.model;
2
3  import java.util.List;
14
15 @Entity
16 public class Orders {
17
18     @Id
19     @GeneratedValue(strategy = GenerationType.IDENTITY)
20     private Integer orderId;
21
22     @NotNull(message = "Order date must not be null")
23     private String orderDate;
24
25     @NotNull(message = "Amount must not be null")
26     private Double amount;
27
28     @OneToOne
29     @JoinColumn(name = "customer_id", referencedColumnName = "id")
30     private Customer customer;
31
32     // Specify the join table to map the many-to-many relationship
33     @ManyToMany
34     @JoinTable(
35         name = "order_product",  // The name of the join table
36         joinColumns = @JoinColumn(name = "order_id"),  // Foreign key column in the join table for Orders
37         inverseJoinColumns = @JoinColumn(name = "product_id")  // Foreign key column in the join table for Products
38     )
39     private List<Product> products;
40
41     // Getters and setters
42     public Integer getOrderId() {
43         return orderId;
```

```java
44        }
45
46        public void setOrderId(Integer orderId) {
47            this.orderId = orderId;
48        }
49
50        public String getOrderDate() {
51            return orderDate;
52        }
53
54        public void setOrderDate(String orderDate) {
55            this.orderDate = orderDate;
56        }
57
58        public Double getAmount() {
59            return amount;
60        }
61
62        public void setAmount(Double amount) {
63            this.amount = amount;
64        }
65
66        public Customer getCustomer() {
67            return customer;
68        }
69
70        public void setCustomer(Customer customer) {
71            this.customer = customer;
72        }
73
74        public List<Product> getProducts() {
75            return products;
76        }
77
78        public void setProducts(List<Product> products) {
79            this.products = products;
80        }
81 }
```

## Category.java

```java
 1  package com.ProductRestApi.model;
 2
 3  import java.util.List;
11
12  @Entity
13  public class Category {
14
15      @Id
16      @GeneratedValue(strategy = GenerationType.IDENTITY)
17      private Integer id;
18
19      private String name;
20
21      private String description;
22
23      @OneToMany(mappedBy = "category", cascade = CascadeType.ALL, orphanRemoval = true)
24      private List<Product> products;
25
26      public Category() {}
27
28      public Category(String name, String description) {
29          this.name = name;
30          this.description = description;
31      }
32
33      // Getters and Setters
34      public Integer getId() {
35          return id;
36      }
37
38      public void setId(Integer id) {
39          this.id = id;
40      }
41
42      public String getName() {
43          return name;
44      }
45
```

```java
42      public String getName() {
43          return name;
44      }
45
46      public void setName(String name) {
47          this.name = name;
48      }
49
50      public String getDescription() {
51          return description;
52      }
53
54      public void setDescription(String description) {
55          this.description = description;
56      }
57
58      public List<Product> getProducts() {
59          return products;
60      }
61
62      public void setProducts(List<Product> products) {
63          this.products = products;
64      }
65  }
```