

Create One-to-Many and Many-to-One mappings for Category and Product.

Attributes for Product class (product.java):

- private Integer id
- private String name
- private String manufacture
- private Double price
- private String description

Attributes for Category class (category.java):

- private Integer id
- private String name
- private String description

Code –

Product.java

```
1 package com.ProductRestApi.model;
2
3 import jakarta.persistence.Entity;
4
5
6
7
8
9
10 @Entity
11 public class Product {
12
13     @Id
14     @GeneratedValue(strategy = GenerationType.IDENTITY)
15     private Integer id;
16
17     private String name;
18
19     private String manufacture;
20
21     private Double price;
22
23     private String description;
24
25     @ManyToOne
26     @JoinColumn(name = "category_id", nullable = false) // Foreign key reference
27     private Category category;
28
29     public Product() {}
30
31     public Product(String name, String manufacture, Double price, String description, Category category) {
32         this.name = name;
33         this.manufacture = manufacture;
34         this.price = price;
35         this.description = description;
36         this.category = category;
37     }
38 }
```

```

39 // Getters and Setters
40 public Integer getId() {
41     return id;
42 }
43
44 public void setId(Integer id) {
45     this.id = id;
46 }
47
48 public String getName() {
49     return name;
50 }
51
52 public void setName(String name) {
53     this.name = name;
54 }
55
56 public String getManufacture() {
57     return manufacture;
58 }
59
60 public void setManufacture(String manufacture) {
61     this.manufacture = manufacture;
62 }
63
64 public Double getPrice() {
65     return price;
66 }
67
68 public void setPrice(Double price) {
69     this.price = price;
70 }
71

```

```

67
68 public void setPrice(Double price) {
69     this.price = price;
70 }
71
72 public String getDescription() {
73     return description;
74 }
75
76 public void setDescription(String description) {
77     this.description = description;
78 }
79
80 public Category getCategory() {
81     return category;
82 }
83
84 public void setCategory(Category category) {
85     this.category = category;
86 }
87 }

```

Category.java

```

1 package com.ProductRestApi.model;
2
3 import java.util.List;
4
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
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 }

```