**1. Create a User**

python

from django.contrib.auth.models import User

# Create a user

user = User.objects.create\_user(username="Lakshmi", password="securepassword123")

**2. Create a Category**

python

from products.models import Category

# Create a category

category = Category.objects.create(name="Electronics")

**3. Create Products**

python

from products.models import Products

# Create products

product1 = Products.objects.create(name="Laptop", price="1000.00", category=category, description="High-performance laptop")

product2 = Products.objects.create(name="Smartphone", price="3000.00", category=category, description="Latest smartphone model")

product3 = Products.objects.create(name="Refrigerator", price="1000.00", category=category, description="Double-door fridge")

**4. Create an Order**

python

from products.models import Order, OrderProduct

# Create an order for the user

order = Order.objects.create(user=user)

# Add products to the order with quantities

OrderProduct.objects.create(order=order, product=product1, quantity=2) # Laptop \* 2

OrderProduct.objects.create(order=order, product=product2, quantity=1) # Smartphone \* 1

OrderProduct.objects.create(order=order, product=product3, quantity=3) # Refrigerator \* 3

**5. Calculate Total Bill**

To apply discounts and taxes:

python

print("Total bill (10% discount, 5% tax):", order.total\_bill(discount=10, tax=5))

**Expected Calculation**:

* **Subtotal**:
* Laptop (1000 \* 2) = 2000
* Smartphone (3000 \* 1) = 3000
* Refrigerator (1000 \* 3) = 3000
* Total Subtotal = 2000 + 3000 + 3000 = 8000
* **Discount (10%)**:
* 10% of 8000 = 800
* After Discount = 8000 - 800 = 7200
* **Tax (5%)**:
* 5% of 7200 = 360
* Final Total = 7200 + 360 = 7560

**Output**:

Total bill (10% discount, 5% tax): 7560.00

1. We can also retrieve all the Orders we have with particular **USER**
   1. For this get user first
      1. user = User.objects.get(id = 3)
      2. orders = user.orders.all()
      3. for ord in orders: print(ord.id) #will get all the order ids of this user
2. We can also check all the Products ordered by the **USER** in Particular **ORDER**
   1. First get the order id
      1. order = Order.objects.get(id=2)
      2. products = order.products.all()
      3. for prod in products: print(prod.name) #will get all the products names
3. we can also check One Order has how many **Products**
   1. from products.models import OrderProduct #manytomany lookup table
   2. # Count the products that include the order with ID 2
   3. product\_count = OrderProduct.objects.filter(order\_id=2).count()
   4. print(\_"Order ID 2 has ", product\_count, " product\_count.")
4. we can also check One Product is part of how many **orders**
   1. from products.models import OrderProduct #manytomany lookup table
   2. # Count the orders that include the product with ID 11
   3. order\_count = OrderProduct.objects.filter(product\_id=11).count()
   4. print(\_"Product ID 11 is part of", order\_count, "orders.")