

# Assignment – 1

**Q1** - Create the Necessary Object Oriented classes for an Online Shopping Business.

**Ans –**

The necessary Object Oriented Classes required and their uses are listed below

Sno	Class	Use
1	Product	Represents items available for purchase in the online store. It includes details like product ID, name, description, price, and stock quantity.
2	Customer	Represents a customer using the online shop. It includes customer-specific details such as customer ID, name, email, and address.
3	OrderItem	Represents individual items within an order or shopping cart. It includes the product being ordered and the quantity of that product.
4	Order	Represents a complete order placed by a customer. It includes the customer's information, the list of ordered items, the order status, and the total price.

5	ShoppingCart	Manages items that a customer has added before finalizing their purchase. It tracks products added to the cart and the total price.
6	Payment	Manages payment processing for orders. It includes details like payment method, transaction ID, and payment status.
7	Shipping	Manages the shipping process for orders. It includes details like shipping address, tracking number, and shipping status.
8	OnlineShop	Acts as the main system managing the entire online shopping business. It keeps track of products, customers, orders, and possibly the inventory, and coordinates between them.