Assignment – 1

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

**Ans** –

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

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| **Sno** | **Class** | **Use** |
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| 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. |

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| 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. |