

## Single-Level Inheritance

### 1.) Question-1

```
class order :
    def __init__(self,order_id,items,amount):
        self.o_i=order_id
        self.items=items
        self.amt=amount

    def show_order(self):
        tax = 50
        total_amt = self.amt + tax
        print(f"Order ID : { self.o_i}")
        print(f"Items : {self.items}")
        print(f"Amount : {self.amt}")
        print(f"Tax : {tax}")
        print(f"Total_Tax : {total_amt}")

class Delivery(order):

    def show_delivery(self):
        super().show_order()
        print("Delivery Status: Out for Delivery")
        print("Expected Delivery: Within 2 hours")

obj=Delivery("ZPIK123",["apple","banana","mango"],450)
obj.show_delivery()
```

### OUTPUT:

```
Order ID : ZPIK123
Items : ['apple', 'banana', 'mango']
Amount : 450
Tax : 50
Total_Tax : 500
Delivery Status: Out for Delivery
Expected Delivery: Within 2 hours
```

## 2.) Question-2

```
class Product:
    def __init__(self, name, price, category):
        self.name = name
        self.price = price
        self.category = category

    def show_product(self):
        platform = "Amazon"
        print(f"Platform: {platform}")
        print(f"Product Name: {self.name}")
        print(f"Price: ₹{self.price}")
        print(f"Category: {self.category}")

class DiscountedProduct(Product):
    def show_discount(self, discount_percentage):

        super().show_product()

        final_price = self.price - (self.price * discount_percentage / 100)
        print(f"Discount: {discount_percentage}%")
        print(f"Original Price: ₹{self.price}")
        print(f"Final Price after discount: ₹{final_price}")

discounted_product = DiscountedProduct(
    name="Wireless Bluetooth Headphones",
    price=2999,
    category="Electronics"
)

discounted_product.show_discount(15)
```

### OUTPUT:

**Platform: Amazon**  
**Product Name: Wireless Bluetooth Headphones**  
**Price: ₹2999**  
**Category: Electronics**

**Discount: 15%**

**Original Price: ₹2999**

**Final Price after discount: ₹2549.15**

### 3.) Question-3

```
class Ride:
    def __init__(self, ride_id, pickup, drop):
        self.ride_id = ride_id
        self.pickup = pickup
        self.drop = drop

    def show_ride(self):
        distance = 12
        print(f"Ride ID: {self.ride_id}")
        print(f"Pickup Location: {self.pickup}")
        print(f"Drop Location: {self.drop}")
        print(f"Distance: {distance} km")

class Driver(Ride):
    def show_driver(self):

        super().show_ride()

        print("Driver Status: Assigned and on the way")
        print("Driver Name: Raj Sharma")
        print("Vehicle: Honda City")
        print("Rating: 4.8 ")

driver_ride = Driver(
    ride_id="UB123456",
    pickup="MG Road, Bangalore",
    drop="Koramangala, Bangalore"
)

driver_ride.show_driver()
```

**OUTPUT:**

**Ride ID: UB123456**

**Pickup Location: MG Road, Bangalore**  
**Drop Location: Koramangala, Bangalore**  
**Distance: 12 km**  
**Driver Status: Assigned and on the way**  
**Driver Name: Raj Sharma**  
**Vehicle: Honda City**  
**Rating: 4.8**