SQL Queries

Relational Schema:

Address(Address_ID, Apt_Name, Street, city, state, Country, zip)

Phone_Number(phone_ID, num)

Email(email_ID, em)

Admin(Admin_ID,Name, Password)

Supplier(Supplier_ID, Name, Address_ID, email_ID, phone_ID, password)

Product(Product_ID, Name, Supplier_ID, Quantity, Price, Description)

Customer(Customer_ID, Name, Address_ID, Age, phoneID, email_ID, Password, Wallet_ID)

Wallet(Wallet_ID, Customer_ID, balance, upiID)

Bag(Bag_ID, Product_ID)

Delivery_Agent(Delivery_Agent_ID, Name, Address_ID, Availability, phone_ID, email_ID, Password)

Orders(Order_ID, Customer_ID, bag_ID, Status)

Product_Review(Product_Review_ID, Review, rating)

Delivery_Review(DR_ID, Rating, Review)

Cart(Customer_ID, Product_ID, Supplier_ID, quantity)

Order_Relationship(Order_ID, Product_ID, Customer_ID, Quantity)

Supplies(Product_ID, Supplier_ID)

Sale_Stats(Product_ID, Supplier_ID, Selling_Date, Quantity)

Delivered(Customer_ID, Delivery_Agent_ID, DR_ID)

Delivers(Customer_ID, Order_ID, Delivery_Agent_ID)

Done by Udbhav Singh

Queries

1.
   A.
```
this query finds out the details of the orders that a
particular person has placed
SELECT C.Customer_ID, C.Name, o.Delivery_date,
b.Product_ID
FROM Customer C
        JOIN orders o on C.Customer_ID = o.Customer_ID
        JOIN bag b on b.Bag_ID = o.bag_ID
ORDER BY Customer_ID;
```

B. display the top 5 delivery agents with respect to rating

```
SELECT distinct DA_avg.Name, DA_avg.average_rating
FROM (SELECT delivery_agent.Name,
avg(delivery_review.Rating) as average_rating
     FROM delivery_agent
               JOIN delivered ON
delivery_agent.Delivery_agent_ID =
delivered.Delivery_Agent_ID
               JOIN delivery_review ON delivered.DR_ID
= delivery_review.DR_ID
     GROUP BY delivery_agent.Name) as DA_avg

WHERE 2 >= (SELECT count(distinct d2.average_rating)
           FROM (SELECT delivery_agent.Name,
avg(delivery_review.Rating) as average_rating
                 FROM delivery_agent
                           JOIN delivered ON
delivery_agent.Delivery_agent_ID =
delivered.Delivery_Agent_ID
                           JOIN delivery_review ON
delivered.DR_ID = delivery_review.DR_ID
                 GROUP BY delivery_agent.Name) as d2
           WHERE DA_avg.average_rating <=
d2.average_rating)
order by DA_avg.average_rating desc;
```

C. this query finds all the suppliers who do not sell any products

```
SELECT supplier.Supplier_ID, supplier.Name
from supplier
WHERE NOT EXISTS(SELECT *
                 FROM product
                 where product.Supplier_ID =
supplier.Supplier_ID);
```

2.

A. `INSERT INTO cart VALUES (12, 5, 3,1);`

B. This query finds out the total revenue and total quantity sold per product for a supplier (sales statistics)

```
SELECT Product.Name, SUM(Order_relationship.quantity) AS
total_quantity_sold, SUM(Order_relationship.quantity *
Product.Price) AS total_revenue
FROM product
```

```
INNER JOIN Order_relationship ON Product.Product_ID =
Order_relationship.Product_ID
INNER JOIN Orders ON Order_relationship.Order_ID =
Orders.Order_ID
WHERE Product.Supplier_ID  = 1
GROUP BY Product.Name;
```

3.

A. *This query is used to search through the product catalog for the name of the product(for eg, if we search for bats, it displays all the available bats)*

```
Insert Into Bag Values(9,4);
Insert Into Bag Values(9,5);

SELECT Name
FROM Product
WHERE Name LIKE '%bat%'
GROUP BY Name;
```

B. *Query to update the customer's address (uses UPDATE)*

```
update Address
SET Apt_name= 'Saphire gold Apartments',
Street= 'Dalal Street',
City='New Delhi',
State='Delhi',
Country='India',
zip='110046'
WHERE Address_ID = (SELECT Address_ID FROM customer WHERE
Customer_ID = 2);
```

C. *Queries used while placing an order. Find out an available delivery agent*

```
select Delivery_agent_ID, Name
   from Delivery_Agent
   WHERE availability = TRUE
   ORDER BY Delivery_agent_ID ;
```

D. *To Find the quantity of Different products in the Bag while ordering*

```
Select Product_ID,count(Product_ID)
from Bag
Where Bag_ID=9
Group By Product_ID;
```

4.

A. *This SQL query retrieves the order ID, customer name, and delivery agent name for all delivered orders by joining the Orders, Delivers, Customer, and Delivery_Agent tables based on their respective IDs.*

```
SELECT
   o.Order_ID,
   c.Name AS Customer_Name,
   da.Name AS Delivery_Agent_Name
FROM
   Orders o
INNER JOIN
   Delivers d ON o.Order_ID = d.Order_ID
INNER JOIN
   Customer c ON d.Customer_ID = c.Customer_ID
INNER JOIN
   Delivery_Agent da ON d.Delivery_Agent_ID =
da.Delivery_agent_ID
ORDER BY Order_ID;
```

B. *This query deletes a product from a customer's cart*

```
DELETE FROM cart WHERE Customer_ID = 4 AND Product_ID = 5
AND Supplier_ID = 8;
```