**Project report:**

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**Queries:**

**1. Selection:**

SELECT \* FROM Online\_Retail\_Store.orders WHERE order\_status='Delivered';

Relational Algebra applied here:

σ(order\_status='Delivered')( Online\_Retail\_Store.orders)

This above mentioned query here uses the following relational algebra operation:

σ (Selection): Selects only the tuples in the Online\_Retail\_Store.orders relation where the value of the order\_status attribute is ' Delivered '.

**2. Projection:**

SELECT product\_name,product\_cost,Quantity FROM Online\_Retail\_Store.product;

Relational Algebra applied here:π(product\_name,product\_cost,Quantity)( Online\_Retail\_Store.product)

π (Projection): what this relation does is that it will projects the product\_name,product\_cost,Quantity attributes of the relation Online\_Retail\_Store.product

**3. Update:**

SELECT \* FROM Online\_Retail\_Store.category;

UPDATE Online\_Retail\_Store.category

SET category\_name='B-Series20'

WHERE category\_id='1'

Here we are updating the category\_name of a category with the category\_id =’1’.

**4. Product and Selection:**

SELECT \* FROM Online\_Retail\_Store.delivery\_boy,Online\_Retail\_Store.tracking\_details WHERE Online\_Retail\_Store.delivery\_boy.delivery\_boy\_id=Online\_Retail\_Store.tracking\_details.delivery\_boy\_id;

Here we have used product and selection operations on relations

**5. Various Boolean Operations and Selection:**

SELECT \* FROM Online\_Retail\_Store.product

WHERE Brand\_Name='Gas Relief' OR product\_name='Bagelers';Here we have used product and selection operations on relations

**6.Using ALTER and various boolean operations:**

ALTER TABLE Online\_Retail\_Store.cart ADD CONSTRAINT check\_cart\_cost CHECK (total\_cost >= 0);

Here we are using alter operation to add the constraint that the total\_cost in the cart should be greater than or equal to 0.

**7. Using of join and the various Boolean operations as well as select operations:**

select Online\_Retail\_Store.orders.delivery\_boy\_id,Online\_Retail\_Store.orders.order\_placed\_time,Online\_Retail\_Store.orders.order\_status,Online\_Retail\_Store.delivery\_boy.delivery\_boy\_name,Online\_Retail\_Store.delivery\_boy.delivery\_boy\_average\_rating

from Online\_Retail\_Store.orders

left join Online\_Retail\_Store.delivery\_boy

on Online\_Retail\_Store.orders.delivery\_boy\_id = Online\_Retail\_Store.delivery\_boy.delivery\_boy\_id

where Online\_Retail\_Store.orders.total\_cost>=190.05

8. **Using of temp assignment and the various Boolean operations as well as select operations:**

select del.contact\_number,tr.location,del.delivery\_boy\_name

from Online\_Retail\_Store.delivery\_boy as del, Online\_Retail\_Store.tracking\_details as tr, Online\_Retail\_Store.orders as o

where o.delivery\_boy\_id=del.delivery\_boy\_id and o.track\_id=tr.track\_id

;

9. Using of reassigning,count,distinct,select as well as Boolean operations in this query

SELECT COUNT(DISTINCT pro.Brand\_name)

from Online\_Retail\_Store.product as pro, Online\_Retail\_Store.tracking\_details as tr, Online\_Retail\_Store.orders as o

where pro.Brand\_name!='Tasigna';

10. USING OF SUM IN QUERY WITH REASSIGNMENT

SELECT SUM(pro.product\_cost\*pro.Quantity)

from Online\_Retail\_Store.product as pro, Online\_Retail\_Store.tracking\_details as tr, Online\_Retail\_Store.orders as o;

**Relational Schema:**

customer= (customer\_id ,customer\_name ,contact\_number ,customer\_username , customer\_password ,email\_id ,customer\_address)

admin=(admin\_id, admin\_name, admin\_username, admin\_password)

delivery\_boy= (delivery\_boy\_id, delivery\_boy\_name, delivery\_boy\_username, delivery\_boy\_password, delivery\_boy\_average\_rating, contact\_number, email\_id)

category = (category\_id, category\_name, description)

product = (product\_id , product\_name, product\_cost, Brand\_name, Quantity)

dealer = (dealer\_id, dealer\_name, username, password, address\_of\_operations, contact\_number, email\_id)

product\_feedback = (feedback\_id, rating\_given, review, likes, date\_published)

coupon= (coupon\_id, coupon\_expiry\_date, minimum\_order\_value, percentage\_discount, maximum\_discount, terms\_and\_conditions, coupon\_code)

cart = (cart\_id, total\_cost, description, product\_id, coupon\_id)

bill = (bill\_id, order\_summary, mode\_of\_payment)

tracking\_details = ( track\_id, delivery\_boy\_id, contact\_number, delivery\_status, location)

orders = (order\_id, delivery\_boy\_id, total\_cost, delivery\_address, order\_status, order\_placed\_time, expected\_delivery\_time, track\_id)