

Mihir Kulkarni

33132 L9

Group B: Assignment No.4

Dear Students,

Do the following task

Write following nested sub queries on above DB.

A]. set membership(in, not in)

Get order details of products which are not from electronics and sports category.

Get the name and quantity of product which have either 10 or 20 or 30 quantities.

B]. set comparison (<,>,<=,>=, <some, >=some, <all etc.)

Get the product details whose product price is more than “Apple 7”.

Find the purchase order whose purchase amount is greater than maximum purchase amount.

Also use following keywords in nested sub queries.

EXISTS /NOT EXISTS, ANY etc

A]. set membership(in, not in)

Get order details of products which are not from sweater category.

```
mysql> select o_id from orders where o_id in (select o_id from orders_product where p_id not in (select p_id from product where p_name="sweater"));
+----+
| o_id |
+----+
| 1    |
| 4    |
| 3    |
| 6    |
+----+
4 rows in set (0.00 sec)

mysql> select o_id from orders where o_id in (select o_id from orders_product where p_id in (select p_id from product where p_name="sweater"));
+----+
| o_id |
+----+
| 5    |
+----+
1 row in set (0.00 sec)

mysql>
```

Get the name and quantity of product which have either 2 or 3 quantities.

```
mysql> select orders_product.quantity,product.p_name from orders_product join product on orders_product.p_id=product.p_id where orders_product.quantity in (2,3);
+-----+-----+
| quantity | p_name |
+-----+-----+
| 3        | sweater |
+-----+-----+
1 row in set (0.00 sec)
```

B]. set comparison (<,>,<=,>=, <some, >=some, <all etc.)

Get the product details whose product price is more than “sweater”.

```
mysql> select * from product where p_cost > (select p_cost from product where p_name="sweater");
+-----+-----+
| p_id | p_name | p_cost |
+-----+-----+
| 1 | jeans | 1200 |
| 2 | T-shirt | 800 |
| 3 | jacket | 1000 |
+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from product;
+-----+-----+
| p_id | p_name | p_cost |
+-----+-----+
| 1 | jeans | 1200 |
| 2 | T-shirt | 800 |
| 3 | jacket | 1000 |
| 4 | notebook | 50 |
| 5 | hat | 200 |
| 6 | sweater | 500 |
+-----+-----+
6 rows in set (0.00 sec)

mysql> 
```

Find the purchase order whose purchase amount is greater than maximum product amount.

```
mysql> select * from product;
+-----+-----+
| p_id | p_name | p_cost |
+-----+-----+
| 1 | jeans | 1200 |
| 2 | T-shirt | 800 |
| 3 | jacket | 1000 |
| 4 | notebook | 50 |
| 5 | hat | 200 |
| 6 | sweater | 500 |
+-----+-----+
6 rows in set (0.00 sec)

mysql> select o_id from orders where amount > ( select max(p_cost) from product);
+-----+
| o_id |
+-----+
| 1 |
| 5 |
+-----+
2 rows in set (0.00 sec)

mysql> select * from orders;
+-----+-----+-----+-----+-----+
| o_id | c_id | items | amount | o_date |
+-----+-----+-----+-----+-----+
| 1 | 1 | 2 | 1900 | 2020-09-01 |
| 3 | 6 | 1 | 800 | 2018-09-01 |
| 4 | 1 | 1 | 50 | 2021-07-01 |
| 5 | 4 | 3 | 1500 | 2020-06-12 |
| 6 | 7 | 2 | 250 | 2020-05-05 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> 
```