Sub query

Sub query (Nested sub query)

--Query within query i.e. outer query (OQ) and inside inner query (IQ).

--OQ and IQ are independent.

--It follows bottom up approach

--Inside Sub query, IQ always execute only once.

select * from persons where eid <(select Max(eid)from persons);

select max(eid) from persons where eid <(select Max(eid)from persons);

select max(eid) from persons where eid< (select max(eid) from persons where eid <(select Max(eid)from persons));

Q. Find out 4th max Salary.

Q. Find Out 3rd Min Salary.

Q. Display Salary except (50000,55000,65000,70000) from table using sub query.

--Exist and Not Exist

--EXIST is used to check whether the result of co-related nested query is empty or not.

--Exist(S)

--TRUE: S has atleast one row/record

--FALSE : S has no row/record.

--NOT EXIST(S)

--TRUE:S has no row/record.

--FALSE :S has atleast one row/record

```
Create Table customer(C_ID varchar(5) primary key ,CNAME varchar(20),Loc varchar(20))



insert into customer values('C1','AMIT','PUNE')

insert into customer values('C2','Sumit','Delhi')

insert into customer values('C3','varun','Mumbai')

insert into customer values('C4','snehal','Latur')

insert into customer values('C5','Raj','Sangli')

insert into customer values('C6','Mohit','Satara')


select * from customer


create table orders(OID int primary key, CID varchar(5),groceries varchar(20))


insert into orders values(1,'C2','almonds')

insert into orders values(2,'C3','deo')

insert into orders values(3,'C1','milk')

insert into orders values(4,'C2','soap')

insert into orders values(5,'C4','dishes')

insert into orders values(6,'C2','rice')


select * from orders


select * from customer C where exists (select * from orders O where C.C_ID =O.CID )
```

```
select * from customer C where not exists (select * from orders O where C.C_ID =O.CID )
```

--Sub query and Co-Relational Query

--Sub query(Nested subquery)

--Query within query i.e outer query(OQ) and inside inner query(IQ).

--OQ and IQ is independent.

--It follows bottom up approach

--Inside Subquery, IQ always execute only once.

```
select * from customer where C_ID in (select CID from orders) --(C2,C3,C1,C2,C4,C2)
```

--Co-relational query

--Query within query i.e outer query(OQ) and inside inner query(IQ).

--IQ is dependent on outer query.

--It follows top down up approach.

```
select * from customer C where exists (select * from orders O where C.C_ID =O.CID )
```

DDL(Data defination language)

--Rename

alter table employee RENAME To Employee_details -- it will work in SQL devloper or MySql or PostgreySql

--Inside in SQL server we can rename the column names by using internal store procedure i.e. SP_RENAME.

--Syntax: SP_RENAME Tablename.OLDCOLUMN_NAME,NEWCOLUMN_NAME

select * from employee

sp_rename 'Info_3.dept','department'