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 (Correlational Query)

--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 )

**---Table for Row\_num, Rank, Dense\_rank**

|  |  |  |  |
| --- | --- | --- | --- |
| **Marks** | **Row\_num** | **rank** | **Dense\_rank** |
| 10 | 1 | 1 | 1 |
| 10 | 2 | 1 | 1 |
| 20 | 3 | 3 | 2 |
| 20 | 4 | 3 | 2 |
| 30 | 5 | 5 | 3 |
| 40 | 6 | 6 | 4 |
| 40 | 7 | 6 | 4 |
| 40 | 8 | 6 | 4 |
| 50 | 9 | 9 | 5 |
| 50 | 10 | 9 | 5 |
| 60 | 11 | 11 | 6 |
| 70 | 12 | 12 | 7 |
| 80 | 13 | 13 | 8 |