create database employee

use employee

show databases

create table employeedetails(

empid int,

empname varchar(20),

deptname varchar(20),

salary int

)

insert employeedetails values(101,'aaaa','HR',5000),(102,'bbbb','admin',4000),(103,'cccc','Finance',5000),(104,'dddd','IT',10000)

insert employeedetails values(105,'eee','HR',6000),(106,'bbbb','admin',8000),(107,'cccc','Finance',3000),(108,'dddd','IT',9000)

select \* from employeedetails

insert employeedetails values(109,'zzz','HR',8500),(110,'yyy','admin',12000),(111,'ppp','Finance',7000),(112,'sss','IT',12000)

insert employeedetails values(113,'fff','HR',8500),(114,'ggg','admin',12000),(115,'rrr','Finance',7000),(116,'sss','IT',13000)

--displays only the max salary and the deptname

select deptname, max(salary) as Max\_Sal

from employeedetails

group by deptname;

--Window functions helps to display the full table along with max\_salary with over()

select e.\*,

max(salary) over() as max\_salary

from employeedetails e

--to find out the max salary from each dept and to display all the dept using window function

--over(partition by)

select e.\*,

max(salary) over(partition by deptname) as max\_salary

from employeedetails e

--row\_number, rank, dense\_rank, lead and lag

select e.\*,

row\_number() over() as Rno

from employeedetails e;

--to assign row no acc to deptname

select e.\*,

row\_number() over(partition by deptname) as Rno

from employeedetails e;

--use case: to fetch the first 2 emp from each dept joined in the company

--first order the emp id and rank them accordingly

--row\_number

select e.\*,

row\_number() over(partition by deptname order by empid) as Rno

from employeedetails e;

--second write a sub query and where clause, the first 2 emp from each dept can be fetched

select \* from (

select e.\*,

row\_number() over(partition by deptname) as Rno

from employeedetails e) x

where x.Rno < 3;

--use case fetch the top 3 emp in each dept earning the max salary

--rank the emp in desc order using rank()

select e.\*,

rank() over(partition by deptname order by salary desc) as Rnk

from employeedetails e;

--fetch the top 3 using the subquery

select \* from (

select e.\*,

rank() over(partition by deptname order by salary desc) as Rnk

from employeedetails e) x

where x.Rnk < 4;

--dense\_rank

select e.\*,

rank() over(partition by deptname order by salary desc) as Rnk,

dense\_rank() over(partition by deptname order by salary desc) as dense\_Rnk,

row\_number() over(partition by deptname) as Rno

from employeedetails e;