**Select Condition**

**Q-1-** **List information of all the employee from emp table?**

Ans: select \* from emp

**Q-2-Display employes name , job and sal**

**Ans:** select ename,job,sal

from emp

**Q-3-** find structure of data

ANS: sp\_help emp

**Q-4-** list department information for the table dept

Ans: sp\_help dept

**Q-5 – find out name,detno,sal,& annual sal for all emp**

**Ans:** select ename,job,sal,sal\*12 as inc

from emp

**Q-6- find out name,detno,sal,& annual sal along with 500 bonus for all emp**

**Ans:** select ename,job,sal,(sal+500)\*12 as inc

from emp

**Q-7:-** select EMPNO,EMPNO,sal,COMM,SAL+COMM

from emp

or select \*,Sal+COMM

**Q-8:-Assigne the alies to loc column**

**Ans:** select loc as "location's"

from dept

**Q-9:- generate report based on the given example –smith work as as cleark**

**Ans:** select \*,ENAME+' '+JOB as Result

from emp

**Q-10:- type casting the name and hiredate from emp table**

**Ans:** Select ENAME,ENAME+cast(HIREDATE as varchar)

from emp

**Q-11: Create report with following information eg-smit earns anunul salary**

**Ans:** select \*,ENAME+' earn '+cast(SAL\*12 as varchar)+ ' anunul salary'

from emp

Q-12: Top Clouse

Ans: select top 6 \*

from emp

**Where Condition**

Q-1:list information of employe earning more than 2000

Ans: select ename,sal,comm

from EMP

where sal>2000

Q-2: list emp other than cleark

Ans: select ename,sal,comm,job

from Emp where job !='CLERK'

Q-3:list emp join after 1981

Ans: select ename,sal,HIREDATE,comm,job

from Emp where HIREDATE > '1981-12-31 00:00:00.000'

**Where Condition and logical oprators**

**NOT > AND> OR is the using criteria**

Q-1:list all clearks earning less than 1000

**Ans:** select ename,sal,HIREDATE,comm,job

from Emp

where job='CLERK' and sal<1000

Q-2:find out emply earning more than 2500 working as manager or analyst

ANS: select ename,sal,HIREDATE,comm,job

from Emp

where (job='MANAGER' or job='ANALYST') and sal>2500

Q-3 display records or details of transaction showing india seles above 1000 along with France sales above 500

Ans: select country,sales

from Products2

where (country='india' and sales>1000) or (country='france' and sales>500)

Q-4 – find out employees joined from 81-82

Ans: select \*

from emp

where HIREDATE between '1981-01-01' and '1982-12-31'

Q-5 – find out employees not joined from 81-82

Ans: select \*

from emp

where HIREDATE Not between '1981-01-01' and '1982-12-31'

**Q-6: list all employee reporting any of these managers 7892,7789,7902,7566,7839,5543**

**Ans:** select \*

from emp

where mgr in (7892,7789,7902,7566,7839,5543)

Q-7 – find out all employee not eligible for commission

Ans: select \*

from emp

where COMM is NULL

Q-8 – find out all employee eligible for commission

ANS: select \*

from emp

where COMM is NOT NULL

Like opratores

Q-1- list department with name ending with ‘ING’

Ans: select \* from dept

where dname like '%ING'

Q-2-display all emp earning in throuseds

Ans: select \* from emp

where sal like '\_\_\_\_'

Q-3 – sorting

Ans:

select \*

from emp

order by HIREDATE

Q-4- sorth emp table based on there jobs for all similar jobs rearrange the recored on salary column from hights to lowest

Ans: select \*

from emp

order by JOB, sal desc

\*\*\*\*\*\*\*\*Functions

Compared value

select \*,

case

area when 'North' then 'N'

when 'South' then 'S'

else 'NA'

end as area

from Products2

Compared conditions

select ename,sal,

case

when sal>=5000 then 'First'

when sal>=3000 then 'second'

when sal>=2000 then 'third'

when sal>=2000 then 'Fourth'

else 'last'

end as class

from EMP

Q-1: list name ,sal,comm and net sal for all emp

**Ans:** select ename,sal,comm,sal+isNull(comm,0)

from emp

**String Functions**

**Len**

**Q-1: using len function display all emp earning in throusens**

**Ans:** select ename,sal,len(sal)

from emp

where len(sal) =4

Uppler case convert

select \* from emp where ename = upper ('smith')

lower case convert

select \* from emp where ename = lower ('smith')

**Q-1:** [**abc@tomtom.com**](mailto:abc@tomtom.com) **extract the only name form mail**

Ans:select substring('abc@tomtom.com', 1, CHARINDEX('@','abc@tomtom.com')-1)

REPLICATE function

select REPLICATE('Tom',2)

Day-4

Get date function to know the current

select getdate()

Q-1- list name,job,joining date and joining day for amm emp

select ename,sal, datename(dw,hiredate) from emp

Q-2 -

select ename,sal, datename(mm,hiredate) from emp

Q-2 – list name hredate and tenure of every emp

select ename,HIREDATE, datediff(yy,hiredate,getdate()) from emp

Q-3 display date after 1 year from now

select ename,HIREDATE, dateadd(yy,1,getdate())

Q-4 display name hiredate,review date after 6 month

Ans: select ename,hiredate, dateadd(mm,6,getdate()) from emp

Result in $

select ename, sal, '$'+ cast(sal as varchar)+'.00' from emp

convert date function

select convert(varchar(30),getdate(),101)

select CONVERT(varchar,cast('12-03-1900' as date), 0)

**Group by function**

**The unique value present column not to include in group by**

select sum(sal),min(sal) from emp

Q-1 calculate total, max,min, and diffrance for all emp

select sum(sal),min(sal),max(sal),max(sal)-min(sal) from emp

Q-1- find out most recent jones date

select max(hiredate) from emp

Q-2- find out average commisssuin if the company

select AVG(comm),avg(isnull(comm,0)) from emp

**Q-1: find out the total number of emp working in each dept**

**Ans:** select deptno,count(ename)

from emp

group by deptno

**Q-1:list empyee details in following form**

**Total emp joined company for each year**

**Ans:** select DATENAME(yy,HIREDATE),count(\*)

from emp

group by DATENAME(yy,HIREDATE)

select DEPTNO,sum(SAL)

from emp

group by DEPTNO

having sum(SAL)>10000

**Q-1: list job with at least 4 employe working for that job**

**Ans:** select job,count(job)

from emp

group by job

having count(job)>=4

**Q-2 display all emp name along with dept names**

Ans: select ename,dname

from emp

inner join dept

on (emp.deptno=dept.deptno)

**Q-3- find emp names along with theaire working location list all location irrespectibe of emplyees working in them**

Ans: select d.deptno,ename,loc

from new\_emp as e

right outer join dept as d

on (e.deptno=d.deptno)

**Q-4 – list all emp from new\_emp table who may or not have belong to department**

**Ans:** select d.deptno,ename,loc

from new\_emp as e

left outer join dept as d

on (e.deptno=d.deptno)

**Q-5 list all emp along with all dept**

**Ans:** select d.deptno,ename,loc

from new\_emp as e

full outer join dept as d

on (e.deptno=d.deptno)

**self-join example**

select e.ename,m.ename

from new\_emp as e

inner join new\_emp as m

on(e.mgr=m.empno)

**cross join example**

select dname,ename

from emp

cross join dept

select e.ename,d.dname,p.pname

from e

inner join d

on (e.deptno = d.deptno)

inner join p

on (d.pcode = p.pcode)

**Subquery -query within query**

**Q-1 – to see records of person who earn sal higher than smith sal**

**Ans:** select ename,sal

from emp

where sal>(select sal

from emp where ename ='ward')

**Q-2 – list emp working having job same as smith s job**

**Ans:** select ename,job

from emp

where job = (select job

from emp where ename ='smith')

**or use this query**

select ename,job

from emp

where job = (select job

from emp where ename ='smith') and ename !='smith'

Q-1: display name of highest earner

Ans: select ename,job

from emp

where sal = (select max(sal)

from emp)

Q-2: find list of emp working in sales dept

**Ans:** select ename,job,deptno

from emp

where deptno=(select DEPTNO

from dept

where dname ='sales')

Ex: ing

select ename,job,deptno

from emp

where deptno=(select DEPTNO

from dept

where dname like '%ing')

Ex: ing + order by

select ename,job,deptno

from emp

where deptno=(select DEPTNO

from dept

where dname like '%ing')

order by job

Multi raw subquery

Q-1: list all emp earning sal more than lowest avg sal per dept

Ans: select ename,job,deptno,SAL

from emp

where sal <all(select avg(sal)

from emp

group by DEPTNO)

Q-2:find all emp working in dept same as that of any of the managers depr

Ans: select ename,job,deptno,SAL

from emp

where DEPTNO in (

select DEPTNO from emp

where job='MANAGER')

Non paire wise query

Q:1: gererate a report showing data of emp working in dept of jones and reporing to same manager as that of alllen

Ans: select \*

from emp

where DEPTNO =(

select DEPTNO from emp

where ename='jones'

)

AND

MGR=( select MGR from emp

where ename='allen')

* Nested query

Q:-1: list emp earning more than the aveg sal for the job of miller

Ans\_ select \*

from emp

where

sal>( select avg(sal) from emp

where job=( select job from emp

where ename='MILLER')

)

Exist and not exist oprator

Q:1 -list emp if they are reporting to mgr 7934

Ans: select ename,job,sal

from emp

where EXISTS (select Null

from emp

where mgr =7934)

Drived table

Example:

select a.ename,a.sal,a.job,b.Salavg,a.sal-b.salavg as "raise"

from emp a inner join (select job,avg(sal) as Salavg from emp group by job )b

on a.job =b.job

where a.sal>b.Salavg

DML Command

Create,delete,update

Copy all structure date in to other table

Insert single records

select \* into emp\_copy from emp

select \* into dept\_copy from DEPT

Q:1- enter following records dep\_copy table – 55,hr,poland

Ans: insert into dept\_copy

values (55,'hr','poland')

Insert set of records

Q:2 – using emp\_copy table enter value for column – emono,ename,job,sal,

Ans: insert into emp\_copy (empno,ename,job,sal)

values (12,'Tanaji','Acc',3000)

**Update**

**Q:1 empty all comm value from emp\_copy table**

**Ans:** update emp\_copy

set comm=null

Q:2 update emp copy table based on dept copy table give 5% raise in sal to emp working in sales

Ans: update emp\_copy

set sal=sal+(sal\*0.05)

where deptno=(select deptno from dept\_copy

where dname='sales')

Q:3 change the dept of accounting to india to newyark

Ans: update dept\_copy

set loc= 'india'

where loc='NEW YORK'

Delete

Q\_1- remove dep-20 from emp\_copy

Ans: delete from emp\_copy

where DEPTNO=20

Q-2- remove all emp from emp\_copy

Ans: delete from emp\_copy

where datename(mm,HIREDATE) = 'May'

DDL: **CREATE,ALTER,DROP,TRUNCATE**

**Q-1- create table customers cid,cname,phone,bdate**

**Ans:** create table customers (cid int, cname varchar(10), phone int, bdate date)

**Q-2- add amnt and cust\_type column to above custmores table**

**Ans:** alter table customers add amnt int ,cust\_type varchar(10)

**Q-3- change the datatype for phone as varechar from int custmores table**

Ans:alter table customers alter column phone varchar(20)

**Q-4-Drop the amnt column from custmores table**

**Ans:** alter table customers drop column amnt

Q-5- create a table student with following column

Studid,sname,bdate,course,fees>1000,email,join\_date(jdt more than bdate)

Ans: create table student (studid int constraint stud\_dno\_pk primary key,

sname varchar(15) constraint stud\_dnm\_NN not null,

cource1 varchar(15) constraint cour\_1 check(cource1 in('C','JAVA','SS')),

email varchar(15) constraint mail\_loc\_UQ unique,

fees int constraint fee\_1 check(fees>1000),

bdate date,

join\_date date,

constraint gdt\_morethan\_bdate check(bdate<join\_date))

Foregne key

Q-1 create cirtificates cid,cname,issue\_dt,marks –0 to 100,grade,stud\_status(a,p,other),rollno—fk referring to students table

Ans: create table certificates

(cid int constraint c\_ID primary key,

cname varchar(15) constraint stud\_dnm\_NN not null,

stud\_status varchar(15) constraint st\_1 check(stud\_status in('A','P','other')),

issue\_dt date,

grade varchar(15),

marks int constraint marks\_1 check(marks between 0 and 100 ),

rollno int,

constraint std\_roll\_fk foreign key(rollno) references student(studid))

As like on delete chek on udate is present or not

Set Operators

Q:1- display current as well as previous job of all emp display each job only once

Ans: select \* from employees

union

select \* from job\_history

Q:2-show empyess who have not change theair job even once during theire tenure in company

Ans: select \* from employees

except

select \* from job\_history

Q:3- show employee currently working with the same profile as earlier.

Ans: select \* from employees

intersect

select \* from job\_history

Views

Q1:-list names,dept,jobs,salaries of all cleark through a view

Ans: create view clearkdata1 as

select ename,deptno,job,sal from emp

where job='clerk'

Q-2: a view dept30 should display names,salries and job of employer working in the department 30

Ans: create view dept30 as

select ename,deptno,job,sal from emp\_copy

where DEPTNO=30

Order by set featch records

Example:

select \* from emp

order by empno

offset 5 rows

fetch next 3 rows only

Q:1 – display name,sal,hiredate and year of jning .sort on year of joining this recored on hiredate column with 10 t0 14

Ans: select empno,ename,sal,job,hiredate from emp

order by hiredate

offset 10 rows

fetch next 4 rows only

Group by enhancement grouping sets

select job,deptno,sum(sal) as total

from emp

group by grouping sets((job),(job,deptno),(deptno),())