

SQL*Plus: Release 21.0.0.0.0 - Production on Sun Sep 29 09:52:46 2024
Version 21.3.0.0.0

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Oracle Database 21c Express Edition Release 21.0.0.0.0 - Production
Version 21.3.0.0.0

1) Create table Department with fields deptno, dname, location.

```
SQL> create table Department1(deptno int, dname varchar(15),location
2  varchar(15));
```

Table created.

2)

Insert the following records by using any one method

Deptno	Dname	Location
10	Accounting	Mumbai
20	Research	Pune
30	Sales	Nagpur
40	Operations	Nashik

```
SQL> insert into Department1 values(10,'Accounting','Mumbai');
```

1 row created.

```
SQL> insert into Department1 values(20,'research','pune');
```

1 row created.

```
SQL> insert into Department1 values(30,'sales','nashik');
```

1 row created.

```
SQL> insert into Department1
2  values(40,'operations','nagpur');
```

1 row created.

3.List the department information.

```
SQL> select * from Department1;
```

DEPTNO	DNAME	LOCATION
10	Accounting	Mumbai
20	research	pune
30	sales	nashik
40	operations	Nagpur

4.Create table employee as shown below.

```
SQL> create table employeee(empno int primary key,ename
2  varchar(20),job varchar(20),mgr int,joined_date date,salary
```

```
3 int,commission int,deptno int,address varchar(20));
```

Table created.

```
SQL> insert into employeee values(1001,'nilesh
2 joshi','clerk',1005,'19-Dec-95',2800,600,20,'nashik');
```

1 row created.

```
SQL> insert into employeee values(1002,'avinash
2 pawar','salesmen',1003,'20Feb-96',5000,1200,30,'nagpur');
```

1 row created.

```
SQL> insert into employeee values(1003,'amit
2 kumar','manager',1004,'2-Mar-86',2000,null,30,'pune');
```

1 row created.

```
SQL> insert into employeee values(1004,'nitin
2 kulkarni','president',null,'19-Mar-86',50000,null,10,'mumba
i');
```

1 row created.

```
SQL> insert into employeee values(1005,'niraj
2 sharma','analyst',1003,'3-Dec-98',12000,null,20,'satara');
```

1 row created.

*

```
SQL> insert into employeee values(1006,'pushkar
2 deshpande','salesmen',1003,'1-Sep-96',6500,1500,30,'pune');
```

1 row created.

```
SQL> insert into employeee values(1007,'sumit
2 patil','manager',1004,'1May-91',25000,null,20,'mumbai');
```

1 row created.

```
SQL> insert into employeee values(1008,'ravi
2 sawant','analyst',1007,'19-nov-95',1000,null,null,'amravati
');
```

1 row created.

5) Write a query to display employee information. Write a name of column explicitly.

```
SQL> select * from employeee;
```

EMPNO	ENAME		JOB	MGR	JOINED_DA
1001	nilesh joshi		clerk	1005	19-DEC-95
2800	600	20	nashik		
1002	avinash pawar		salesmen	1003	20-FEB-96
5000	1200	30	nagpur		
1003	amit		manager	1004	02-MAR-86

EMPNO	ENAME		JOB	MGR	JOINED_DA
2000	kumar				
		30	pune		
1004	nitin kulkarni		president		19-MAR-86
50000		10	mumbai		
1005	niraj sharma		analyst	1003	03-DEC-98

EMPNO	ENAME		JOB	MGR	JOINED_DA
12000		20	satara		
1006	pushkar deshpane		salesmen	1003	01-SEP-96
6500	1500	30	pune		
1007	sumit patil		manager	1004	01-MAY-91
25000		20	mumbai		

EMPNO	ENAME		JOB	MGR	JOINED_DA
1008	ravi sawant		analyst	1007	19-NOV-95
1000			amravati		

8 rows selected.

6) Create a query to display unique jobs from the table.
SQL> select distinct(job) from employee;

JOB

```

-----
clerk
salesmen
manager
president
analyst

```

7) Change the location of dept 40 to banglore instead of Nagpur.
 SQL> update Department1 set location='banglore' where deptno=40;

1 row updated.

SQL> select * from Department1;

DEPTNO	DNAME	LOCATION
10	Accounting	Mumbai
20	research	pune
30	sales	nashik
40	operations	banglore

8) Change the name of the employees 1003 to nikhil gosavi
 SQL> update employeee set ename='nikhil gosavi' where empno=1003;
 ;

1 row updated.

SQL> select * from employeee;

EMPNO	ENAME	JOB	MGR	JOINED_DA
1001	nilesh joshi	clerk	1005	19-DEC-95
2800	600	20 nashik		
1002	avinash pawar	salesmen	1003	20-FEB-96
5000	1200	30 nagpur		
1003	nikhil gosavi	manager	1004	02-MAR-86

EMPNO	ENAME	JOB	MGR	JOINED_DA
2000		30 pune		
1004	nitin kulkarni	president		19-MAR-86
50000		10 mumbai		
1005	niraj sharma	analyst	1003	03-DEC-98
12000		20 satara		

EMPNO	ENAME	JOB	MGR	JOINED_DA
SALARY	COMMISSION	DEPTNO ADDRESS		
1006	pushkar deshpande	salesmen	1003	01-SEP-96
6500	1500	30 pune		
1007	sumit patil	manager	1004	01-MAY-91
25000		20 mumbai		
EMPNO	ENAME	JOB	MGR	JOINED_DA
SALARY	COMMISSION	DEPTNO ADDRESS		
1008	ravi sawant	analyst	1007	19-NOV-95
1000		amravati		

8 rows selected.

9) Delete pushkar deshpande from employee table.

SQL> delete from employeee where ename='pushkar deshpande';

0 rows deleted.

SQL> select * from employeee;

EMPNO	ENAME	JOB	MGR	JOINED_DA
SALARY	COMMISSION	DEPTNO ADDRESS		
1001	nilesh joshi	clerk	1005	19-DEC-95
2800	600	20 nashik		
1002	avinash pawar	salesmen	1003	20-FEB-96
5000	1200	30 nagpur		
1003	nikhil gosavi	manager	1004	02-MAR-86
EMPNO	ENAME	JOB	MGR	JOINED_DA
SALARY	COMMISSION	DEPTNO ADDRESS		
2000		30 pune		
1004	nitin kulkarni	president		19-MAR-86
50000		10 mumbai		
1005	niraj sharma	analyst	1003	03-DEC-98

12000		20 satara	
-------	--	-----------	--

EMPNO	ENAME	JOB	MGR	JOINED_DA
1006	pushkar deshpande	salesmen	1003	01-SEP-96
6500	1500	30 pune		
1007	sumit patil	manager	1004	01-MAY-91
25000		20 mumbai		

EMPNO	ENAME	JOB	MGR	JOINED_DA
1008	ravi sawant	analyst	1007	19-NOV-95
1000		amravati		

8 rows selected.

10) Create a table department_temp table from deptarment table, only create the structure not content.
SQL> create table Department1_temp as select * from Department1 where
2 1=2;

Table created.

```
SQL> desc Department1_temp;
```

Name	Null?	Type
DEPTNO		NUMBER(38)
DNAME		VARCHAR2(15)
LOCATION		VARCHAR2(15)

SQL> insert into Department1_temp select * from Department1;

4 rows created.

SQL> select * from
2 Department1_temp;

DEPTNO	DNAME	LOCATION
10	Accouting	Mumbai
20	research	pune
30	sales	nashik
40	operations	banglore

12) Display the list of employee whose salary between 5000 and 20000

SQL> select * from employee where salary between 5000 and 20000;

EMPNO	ENAME	JOB	MGR	JOINED_DA
1002	avinash pawar	salesmen	1003	20-FEB-96
5000	1200	30 nagpur		
1005	niraj sharma	analyst	1003	03-DEC-98
12000		20 satara		
1006	pushkar	salesmen	1003	01-SEP-96

EMPNO	ENAME	JOB	MGR	JOINED_DA
6500	deshpande	30 pune		

13) Display the list of employee excluding job title as 'salesman'.

SQL> select * from employee where job!='salesmen';

EMPNO	ENAME	JOB	MGR	JOINED_DA
1001	nilesh joshi	clerk	1005	19-DEC-95
2800	600	20 nashik		
1003	nikhil gosavi	manager	1004	02-MAR-86
2000		30 pune		
1004	nitin kulkarni	president		19-MAR-86

EMPNO	ENAME	JOB	MGR	JOINED_DA
50000		10 mumbai		
1005	niraj sharma	analyst	1003	03-DEC-98
12000		20 satara		
1007	sumit patil	manager	1004	01-MAY-91
25000		20 mumbai		

EMPNO	ENAME	JOB	MGR	JOINED_DA

```

-----
1008 ravi          analyst          1007 19-NOV-95
    sawant
1000              amravati

```

6 rows selected.

14) Display all those employees whose job title is either 'manager' or 'analyst' (write by using OR & IN operator).

SQL> select * from employee where job='manager' or job='analyst';

EMPNO	ENAME	JOB	MGR	JOINED_DA
1003	nikhil gosavi	manager	1004	02-MAR-86
2000		30 pune		
1005	niraj sharma	analyst	1003	03-DEC-98
12000		20 satara		
1007	sumit patil	manager	1004	01-MAY-91

EMPNO	ENAME	JOB	MGR	JOINED_DA
25000		20 mumbai		
1008	ravi sawant	analyst	1007	19-NOV-95
1000		amravati		

15) Display the employee name & department number of all employees in dept 10,20,30 & 40

SQL> select empno,deptno from employee where deptno in (10,20,30,40);

EMPNO	DEPTNO
1001	20
1002	30
1003	30
1004	10
1005	20
1006	30
1007	20

7 rows selected.

16) Display the employee number, name, job & commission of all employees who do not get any commission.

SQL> select empno,ename,job commision from employee where commission
2 is null;

EMPNO	ENAME	COMMISSION
1003	nikhil gosavi	manager
1004	nitin kulkarni	president
1005	niraj sharma	analyst
1007	sumit patil	manager
1008	ravi	analyst
EMPNO	ENAME	COMMISSION
	sawant	

17) Display the name & salary of all employees whose salary not in the range of 5000 & 10000.

SQL> select ename,salary from employeee where salary not between 5000
2 and 10000;

ENAME	SALARY
nilesh joshi	2800
nikhil gosavi	2000
nitin kulkarni	50000
niraj sharma	12000
sumit	25000
ENAME	SALARY
patil	
ravi	1000
sawant	

6 rows selected.

18) Find all names & joined date of employees whose names starts with 'A'.

SQL> select ename,joined_date from employeee where ename like
2 'A%';

no rows selected

19)Find all names of employees having 'i' as a second letter in their names.

SQL> select ename from employeee where ename like '_i%';

ENAME

nilesh
joshi

nikhil gosavi
nitin
kulkarni

niraj
sharma

20) Find employee number, name of employees whose commission is not null.
SQL> select empno,ename from employeee where commission is not null;

EMPNO	ENAME
1001	nilesh joshi
1002	avinash pawar
1006	pushkar deshpande

21) Display all employee information in the descending order of employee number.

SQL> select * from employeee order by empno;

EMPNO	ENAME	JOB	MGR	JOINED_DA
1001	nilesh joshi	clerk	1005	19-DEC-95
2800	600	20 nashik		
1002	avinash pawar	salesmen	1003	20-FEB-96
5000	1200	30 nagpur		
1003	nikhil gosavi	manager	1004	02-MAR-86

EMPNO	ENAME	JOB	MGR	JOINED_DA
2000		30 pune		
1004	nitin kulkarni	president		19-MAR-86
50000		10 mumbai		
1005	niraj sharma	analyst	1003	03-DEC-98
12000		20 satara		

EMPNO	ENAME	JOB	MGR	JOINED_DA
SALARY	COMMISSION	DEPTNO	ADDRESS	
1006	pushkar deshpande	salesmen	1003	01-SEP-96
6500	1500	30	pune	
1007	sumit patil	manager	1004	01-MAY-91
25000		20	mumbai	

EMPNO	ENAME	JOB	MGR	JOINED_DA
SALARY	COMMISSION	DEPTNO	ADDRESS	
1008	ravi sawant	analyst	1007	19-NOV-95
1000		amravati		

8 rows selected.

22) Display the minimum, maximum, sum & average salary of each job type

```
SQL> select max(salary),min(salary),sum(salary) job from employeee
2 group by job;
```

MAX(SALARY)	MIN(SALARY)	JOB
2800	2800	2800
6500	5000	11500
25000	2000	27000
50000	50000	50000
12000	1000	13000

23) Write a query to display the number of employee with the same department.

```
SQL> select count(empno) deptno from employeee group by deptno;
```

DEPTNO
3
3
1
1

24) Select employee number, ename according to the annual salary in ascending order.

```
SQL> select count(empno),deptno from employeee group by deptno;
```

COUNT(EMPNO)	DEPTNO
3	20
3	30

```

1          10
1          NULL

```

25) Find the department number, maximum salary where the maximum salary is greater than 5000.

```
SQL> select empno,ename,12*salary"annual salary" from employee order
2 by 'annualsalary';
```

EMPNO	ENAME	annual salary
1001	nilesh joshi	33600
1002	avinash pawar	60000
1003	nikhil gosavi	24000
1004	nitin kulkarni	600000
1005	niraj	144000
1006	pushkar deshpande	78000
1007	sumit patil	300000
1008	ravi sawant	12000

8 rows selected.

26) Find all distinct column values from employee & department table.

```
SQL> select deptno,max(salary) from employee group by deptno having
2 max(salary)>5000;
```

DEPTNO	MAX(SALARY)
20	25000
30	6500
10	50000

27) Find all column values with duplicate from employee & department table.

```
SQL> select deptno from employee union select deptno from department1;
```

DEPTNO
20
30
10

28) Find all column values which are common in both employee & department table.

SQL> select deptno from employee union all select deptno from

2 department1;

```

      DEPTNO
-----
        20
        30
        30
        10
        20
        30
        20

        10
        20
        30

```

```

      DEPTNO
-----
        40

```

12 rows selected.

29) Find all distinct column values present in employee but not in department table.

SQL> select deptno from employee minus select deptno from department1;

```

      DEPTNO
-----

```

30) Display the number of employees in the department 30 who can earn a commission.

SQL> select count(empno) from employee where deptno=30
2 and commission is not null;

```

COUNT(EMPNO)
-----
              2

```