

# EXAMPLES:

Assume that we have the following tables.

SQL> select \* from dept;

| DEPTNO | DNAME     | LOC    |
|--------|-----------|--------|
| 10     | INVENTORY | HYBD   |
| 20     | FINANCE   | BGLR   |
| 30     | HR        | MUMBAI |

SQL> select \* from emp;

| EMPNO | ENAME  | JOB      | MGR | DEPTNO |
|-------|--------|----------|-----|--------|
| 111   | saketh | analyst  | 444 | 10     |
| 222   | sudha  | clerk    | 333 | 20     |
| 333   | jagan  | manager  | 111 | 10     |
| 444   | madhu  | engineer | 222 | 40     |



# EXAMPLES:

## 1. EQUI JOIN

A join which contains an equal to '=' operator in the joins condition.

Ex:

SQL> select empno,ename,job,dname,loc from emp e,dept d where e.deptno=d.deptno;

| EMPNO | ENAME  | JOB     | DNAME     | LOC  |
|-------|--------|---------|-----------|------|
| 111   | saketh | analyst | INVENTORY | HYBD |
| 333   | jagan  | manager | INVENTORY | HYBD |
| 222   | sudha  | clerk   | FINANCE   | BGLR |

Using clause

SQL> select empno,ename,job ,dname,loc from emp e join dept d using(deptno);

| EMPNO | ENAME  | JOB     | DNAME     | LOC  |
|-------|--------|---------|-----------|------|
| 111   | saketh | analyst | INVENTORY | HYBD |
| 333   | jagan  | manager | INVENTORY | HYBD |
| 222   | sudha  | clerk   | FINANCE   | BGLR |

On clause

SQL> select empno,ename,job,dname,loc from emp e join dept d on(e.deptno=d.deptno);

| EMPNO | ENAME  | JOB     | DNAME     | LOC  |
|-------|--------|---------|-----------|------|
| 111   | saketh | analyst | INVENTORY | HYBD |
| 333   | jagan  | manager | INVENTORY | HYBD |
| 222   | sudha  | clerk   | FINANCE   | BGLR |



# EXAMPLES:

## 2. NON-EQUI JOIN

A join which contains an operator other than equal to '=' in the joins condition.

Ex:

SQL> **select empno,ename,job,dname,loc from emp e,dept d where e.deptno > d.deptno;**

| EMPNO | ENAME | JOB      | DNAME     | LOC    |
|-------|-------|----------|-----------|--------|
| 222   | sudha | clerk    | INVENTORY | HYBD   |
| 444   | madhu | engineer | INVENTORY | HYBD   |
| 444   | madhu | engineer | FINANCE   | BGLR   |
| 444   | madhu | engineer | HR        | MUMBAI |



# EXAMPLES:

## 3. SELF JOIN

Joining the table itself is called self join.

Ex:

SQL> select e1.empno,e2.ename,e1.job,e2.deptno from emp e1,emp e2 where e1.empno=e2.mgr;

| EMPNO | ENAME  | JOB      | DEPTNO |
|-------|--------|----------|--------|
| 111   | jagan  | analyst  | 10     |
| 222   | madhu  | clerk    | 40     |
| 333   | sudha  | manager  | 20     |
| 444   | saketh | engineer | 10     |

## 4. NATURAL JOIN

Natural join compares all the common columns.

Ex:

SQL> select empno,ename,job,dname,loc from emp natural join dept;

| EMPNO | ENAME  | JOB     | DNAME     | LOC  |
|-------|--------|---------|-----------|------|
| 111   | saketh | analyst | INVENTORY | HYBD |
| 333   | jagan  | manager | INVENTORY | HYBD |
| 222   | sudha  | clerk   | FINANCE   | BGLR |



# EXAMPLES:

## 5. CROSS JOIN

This will give the cross product.

Ex:

SQL> **select empno,ename,job,dname,loc from emp cross join dept;**

| EMPNO | ENAME  | JOB      | DNAME     | LOC    |
|-------|--------|----------|-----------|--------|
| 111   | saketh | analyst  | INVENTORY | HYBD   |
| 222   | sudha  | clerk    | INVENTORY | HYBD   |
| 333   | jagan  | manager  | INVENTORY | HYBD   |
| 444   | madhu  | engineer | INVENTORY | HYBD   |
| 111   | saketh | analyst  | FINANCE   | BGLR   |
| 222   | sudha  | clerk    | FINANCE   | BGLR   |
| 333   | jagan  | manager  | FINANCE   | BGLR   |
| 444   | madhu  | engineer | FINANCE   | BGLR   |
| 111   | saketh | analyst  | HR        | MUMBAI |
| 222   | sudha  | clerk    | HR        | MUMBAI |
| 333   | jagan  | manager  | HR        | MUMBAI |
| 444   | madhu  | engineer | HR        | MUMBAI |



# EXAMPLES:

## 6. OUTER JOIN

Outer join gives the non-matching records along with matching records.

### LEFT OUTER JOIN

This will display the all matching records and the records which are in left hand side table those that are not in right hand side table.

Ex:

```
SQL> select empno,ename,job,dname,loc from emp e left outer join dept d  
on(e.deptno=d.deptno);
```

Or

```
SQL> select empno,ename,job,dname,loc from emp e,dept d where  
e.deptno=d.deptno(+);
```

| EMPNO | ENAME  | JOB      | DNAME     | LOC  |
|-------|--------|----------|-----------|------|
| 111   | saketh | analyst  | INVENTORY | HYBD |
| 333   | jagan  | manager  | INVENTORY | HYBD |
| 222   | sudha  | clerk    | FINANCE   | BGLR |
| 444   | madhu  | engineer |           |      |



# EXAMPLES:

## RIGHT OUTER JOIN

This will display the all matching records and the records which are in right hand side table those that are not in left hand side table.

Ex:

```
SQL> select empno,ename,job,dname,loc from emp e right outer join dept d  
on(e.deptno=d.deptno);
```

Or

```
SQL> select empno,ename,job,dname,loc from emp e,dept d where e.deptno(+) =  
d.deptno;
```

| EMPNO | ENAME  | JOB     | DNAME     | LOC    |
|-------|--------|---------|-----------|--------|
| 111   | saketh | analyst | INVENTORY | HYBD   |
| 333   | jagan  | manager | INVENTORY | HYBD   |
| 222   | sudha  | clerk   | FINANCE   | BGLR   |
|       |        |         | HR        | MUMBAI |



# EXAMPLES:

## FULL OUTER JOIN

This will display the all matching records and the non-matching records from both tables.

Ex:

SQL> select empno,ename,job,dname,loc from emp e full outer join dept d  
on(e.deptno=d.deptno);

| EMPNO | ENAME  | JOB      | DNAME     | LOC    |
|-------|--------|----------|-----------|--------|
| 333   | jagan  | manager  | INVENTORY | HYBD   |
| 111   | saketh | analyst  | INVENTORY | HYBD   |
| 222   | sudha  | clerk    | FINANCE   | BGLR   |
| 444   | madhu  | engineer |           |        |
|       |        |          | HR        | MUMBAI |

## 7. INNER JOIN

This will display all the records that have matched.

Ex:

SQL> select empno,ename,job,dname,loc from emp inner join dept using(deptno);

| EMPNO | ENAME  | JOB     | DNAME     | LOC  |
|-------|--------|---------|-----------|------|
| 111   | saketh | analyst | INVENTORY | HYBD |
| 333   | jagan  | manager | INVENTORY | HYBD |
| 222   | sudha  | clerk   | FINANCE   | BGLR |

