SQL> create table emp(eno number,ename varchar2(15),address varchar2(10));

select \*from emp1;

ENO ENAME ADDRESS

---------- --------------- ----------

1 ram delhi

2 varun chennai

3 ravi banglore

4 amir delhi

SQL> create table dept(dno varchar2(3),dname varchar2(15),eno number(5));

select \*from dept;

DNO DNAME ENO

--- --------------- ----------

d1 hr 1

d2 it 2

d3 mrkt 4

**CROSS JOIN**

SQL> select\* from emp,dept;

or

SQL> select\* from emp cross join dept;

Output:

ENO ENAME ADDRESS DNO DNAME ENO

---------- --------------- ---------------- ---------- ---------- ----------

1 ram delhi d1 hr 1

2 varun chennai d1 hr 1

3 ravi banglore d1 hr 1

4 amir delhi d1 hr 1

1 ram delhi d2 it 2

2 varun chennai d2 it 2

3 ravi banglore d2 it 2

4 amir delhi d2 it 2

1 ram delhi d3 mrkt 4

2 varun chennai d3 mrkt 4

3 ravi banglore d3 mrkt 4

4 amir delhi d3 mrkt 4

12 rows selected.

**INNER JOIN**

1. **THETA JOIN**

SQL> select\* from emp,dept where emp1.eno>dept.eno;

or

SQL> select\* from emp e,dept d where e.eno>d.eno;

ENO ENAME ADDRESS DNO DNAME ENO

---------- --------------- ---------------- ---------- ---------- ----------

2 varun chennai d1 hr 1

2 varun chennai d1 hr 1

3 ravi banglore d1 hr 1

4 amir delhi d1 hr 1

3 ravi banglore d2 it 2

4 amir delhi d2 it 2

**2. EQUI JOIN**

SQL> select\* from emp,dept where emp1.eno=dept.eno;

or

SQL> select\* from emp e,dept d where e.eno=d.eno;

ENO ENAME ADDRESS DNO DNAME ENO

---------- --------------- ---------------- ---------- ---------- ----------

1 ram delhi d1 hr 1

2 varun chennai d2 it 2

4 amir delhi d3 mkrt 2

**3. NATURAL JOIN**

select\* from emp natural join dept ;

ENO ENAME ADDRESS DNO DNAME

---------- --------------- ---------------- ---------- ----------

1 ram delhi d1 hr

2 varun chennai d2 it

4 amir delhi d3 mkrt

**4. SELF JOIN**

SQL> select \* from emp e,emp f where e.ename= f.ename;

ENO ENAME ADDRESS ENO ENAME ADDRESS

---------- --------------- -------------- ---------- --------------- ----------

1 ram delhi 1 ram delhi

2 varun chennai 2 varun chennai

3 ravi banglore 3 ravi banglore

4 amir delhi 4 amir delhi

SQL> select \* from emp e,emp f where e.eno< f.eno;

ENO ENAME ADDRESS ENO ENAME ADDRESS

---------- --------------- ---------- ---------- --------------- ----------

1 ram delhi 2 varun chennai

1 ram delhi 3 ravi banglore

1 ram delhi 4 amir delhi

2 varun chennai 3 ravi banglore

2 varun chennai 4 amir delhi

3 ravi banglore 4 amir delhi

6 rows selected.

**OUTER JOIN**

1. **LEFT OUTER JOIN**

SQL> select \* from emp1 left outer join dept on emp1.eno=dept.eno;

Or

SQL>select \* from emp1 , dept where emp1.eno=dept.eno(+);

Or

SQL> select \* from emp1 e, dept d where e.eno=d.eno(+);

ENO ENAME ADDRESS DNO DNAME ENO

---------- --------------- ---------- --- --------------- ----------

1 ram delhi d1 hr 1

2 varun chennai d2 it 2

4 amir delhi d3 mrkt 4

3 ravi banglore

1. **RIGHT OUTER JOIN**

SQL> select \* from emp1 right outer join dept on emp1.eno=dept.eno;

Or

SQL> select \* from emp1 , dept where emp1.eno(+)=dept.eno;

Or

SQL> select \* from emp1 e, dept d where e.eno(+)=d.eno;

ENO ENAME ADDRESS DNO DNAME ENO

---------- --------------- -------------- ----- --------------- ----------

1 ram delhi d1 hr 1

2 varun chennai d2 it 2

4 amir delhi d3 mrkt 4

1. **FULL OUTER JOIN**

SQL> select \* from emp1 full outer join dept on emp1.eno=dept.eno;

ENO ENAME ADDRESS DNO DNAME ENO

---------- --------------- ---------- ----- ----------- ----------

1 ram delhi d1 hr 1

2 varun chennai d2 it 2

3 ravi banglore

4 amir delhi d3 mrkt 4