**JOINS**

Joins are useful to display data from multiple tables.

Types of joins: 4

i) CROSS JOIN or CARTESIAN PRODUCT

ii) EQUI JOIN / INNER JOIN

iii) SELF JOIN

iv) OUTER JOINS

left outer join

right outer join

full outer join

**CROSS JOIN**

It will display all possible combinations of data from multiple tables. In this join, each value in the first table is mapped with all values in the second table.

syntax:

select col1, col2,...,coln / \* from table1, table2,.... where <condition>;

Ex: Get employee names and dept names ?

select ename,dname from emp, dept;

OR

select ename,dname from emp cross join dept;

Ex:

Get customer details and account details of AJAY?

select \* from cust\_dtls, cust\_act\_dtls where cname='Ajay';

**EQUI JOIN**

It will display only matched data from multiple tables, based on join condition.

A condition is known as join condition if it is specified between common column of the tables.

**syntax**

select col1, col2,...,coln / \* from T1,T2,....

where T1.col=T2.col and T2.col=T3.col...;

Ex: Display enames and dept names ?

select ename,dname from emp,dept where emp.deptno=dept.deptno;

OR

select E.ename,D.dname from emp E,dept D where E.deptno=D.deptno;

Ex: Get clerks along with dept names?

select e.\*, d.dname from emp e, dept d where e.job='CLERK' and e.deptno=d.deptno;

Ex: get managers names,job,salary along with dept details?

select e.ename,e.job,e.salary,d.\* from emp e cross join dept d

where e.job='MANAGER' and e.deptno=d.deptno;

**sample assignments:**

consider the tables COMP\_DTLS and PROD\_DTLS, and write queries for below requirements?

a) Get prod names ,costs and it s company names?

b) Get product details from the company SAMSUNG, along with

company name?

c) Get emp data with dept data who is getting commission?

d)Get salesman data along with dept names?

e) Get LAPTOP details along with company details?

**INNER JOIN**

It will display only matched data like EQUI JOIN, but in the join query we must

use INNER JOIN keyword between the table names. And "join condition" must be written under "ON" clause.

**Syntax**

select . . . . from TB1 INNER JOIN TB2 ON TB1.col=TB2.col where <cond>;

EX

select ename, sal,deptno,dname,loc from emp Inner join dept

ON emp.deptno=dept.deptno;

Ex: display customer name and city, customer actno,acttype and bal, act\_name for all customers?

EQUI JOIN:

select cd.cname,cd.city,cad.actno,cad.act\_type,cad.act\_bal,at.act\_name

from cust\_dtls cd, cust\_act\_dtls cad, act\_types\_info at

where cd.cno=cad.cust\_code

and

cad.act\_type=at.act\_type;

INNER JOIN:

select cd.cname,cd.city,cad.actno,cad.act\_type,cad.act\_bal,at.act\_name

from cust\_dtls cd INNER JOIN cust\_act\_dtls cad

ON cd.cno=cad.cust\_code

INNER JOIN act\_types\_info at

ON cad.act\_type=at.act\_type;

**SELF JOIN**

A table which is joined itself is known as self-join. In this case we can use 2 alias names for single table. Here the alias names are temporary.

syntax:

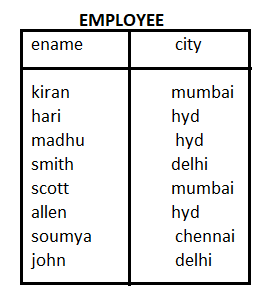
select alias2.\* from T1 alias1, T2 alias2

where alias-1.col='value'

and

alias1.col=alias2.col;

EXAMPLE TABLE:



Ex: display emplyoee details who is living in a city where "john" is living?

select e2.ename,e2.city

from employee e1 inner join employee e2

on e1.ename='JOHN' and e1.city=e2.city;

**OUTER JOINS**

It will display all the data from one table and only matched data from the other table. In between table names we should specify ***"type of outer join"***. Join condition is to be specified under ***"ON"*** clause

Types of outer joins: 3

**Left Outer Join / Left Join**

Display all the data from left table and only matched data from right table.

**Right Outer Join / Right Join**

Display complete data from right table and only matched data from left table.

**Full Outer Join / Full Join**

It will Display

🡪matched data from both tables

🡪unmatched data from left table

🡪unmatched data from right table

syntax:

select col1, col2, col..... / \*

from TBL\_1 [left join / right join / full join] TBL\_2

ON TBL\_1.col=TBL\_2.col;