**NATURAL JOIN**

Natuaral join is similar to inner join. In natural join we don’t write any join condition.

Join operation performed based on primary key and foreign key.

**Syntax**

Select ename,dname,loc

From emp NATURAL JOIN dept;

**OUTER JOIN**

Outer joins are used to obtain the un-match records or the records which do not have pair.

1. **Left outer join:-** It is used to obtain the un-match records of left table along with the match records(inner join output).

**Ansi syntax**

Select col\_name

From table\_name1 left[outer] join table\_name2

On <join\_condition>;

**Oracle syntax**

Select col\_name

From table\_name1 ,table\_name2

Where table\_name1.col\_name = table\_name2.col\_name(+);

1. **Right outer join:-** It is used to obtain the un-matching records of right table along with matching records .(matching records of both table and un-matching records of right table)
2. **Full outer join:-** It is used to obtain un-match records of both table along with match records.

**Syntax**

Select col\_name

From table\_name1 full outer join table\_name2

On <join\_condition>;

**Note:** We don’t have syntax for full outer join in oracle

**SELF JOIN**

Joining a table with itself is known as self-join or joining the same table is known as self join.

**Why do we use self join ?**

Whenever the data to be selected is in the same table but present in 2 different records we go for self join.

**ANSI Syntax**

Select col\_name

From table\_name t1 join table\_name t2

On <join\_condition>;

**Oracle syntax**

Select col\_name

From table\_name t1,table\_name t2

Where <join\_condition>;

**When do we use self join?**

Whenever we want to display the employee name along with their manager we should go for self join

**Ex:** WAQTD employee details along with their manager.

Select \*

From emp e1,emp e2

Where e1.mgr=e2.empno;

**ASSIGNMENT**

1. WAQTD ename and manager name for all the employees.
2. WAQTD ename and his manager name along with their salary if the employees working in deptno 20
3. WAQTD name of the employees and his manager name if employees working as clerk
4. WAQTD name of the employee and manager designation if manager works in dept 10 or 20
5. WAQTD name of the employees and manager salary if the employee and manager both earns more than 2300
6. WAQTD ename and manager hiredate if employee was hired before 1982
7. WAQTD ename and manager’s commission if employee works as salesman and manager in deptno 20.
8. WAQTD ename and manager name and their salary if employees earns more than manager.
9. WAQTD ename & hiredate,manager name & hiredate if manager was hired before employees.
10. WAQTD ename and manager name if both are working in same job
11. WAQTD ename & manager name if manager is working as actual manager.
12. WAQTD ename and manager name along with their annual salaries if employees works in dept 10,20 and manager’s salary is greater than employees manager.