* Natural join
* Inner join
* Ouert join – 1.full outer join

2.Left outer join

3. Right outer join

Joins

--give me emp id, emp name and dept id and deptname for all employees in company

natural join:

Ex.

select hr.employees.first\_name, hr.employees.employee\_id, hr.departments.department\_name,department\_id,manager\_id from hr.employees

natural join hr.departments;

**inner join with using**

Ex. select hr.employees.first\_name, hr.employees.employee\_id, hr.departments.department\_name,department\_id from hr.employees

join hr.departments using (department\_id);

Ex.2 select e.first\_name,d.department\_name,department\_id,e.salary from hr.employees e join hr.departments d using (department\_id);

(alias name can be used in the select statements but can not be use them inside the using cluase)

**inner join with on**

Ex. select e.first\_name,e.employee\_id,d.department\_name,e.department\_id from hr.employees e join hr.departments d on

(e.department\_id = d.department\_id);

outer join:

**Full Outer Join** :

Ex. select count(\*) from hr.employees e full outer join

hr.departments d on(e.department\_id=d.department\_id); Count: 123

select e.First\_name,d.department\_name,e.department\_id empdeptid,d.department\_id deptid from hr.employees e full outer join

hr.departments d on(e.department\_id=d.department\_id);

**Left Outer Join** : It gives all the common rows between left and right tables and it also gives unmatched rows from left table before join keyword.

Ex. Select count(\*) from hr.employees e left outer join

hr.departments d on(e.department\_id=d.department\_id); Ans: 107

Ex. select e.First\_name,d.department\_name,e.department\_id empdeptid,d.department\_id deptid,d.manager\_id from hr.employees e left outer join hr.departments d on(e.department\_id=d.department\_id);

**Right Outer Join** : It gives all the common rows between left and right tables and it also gives unmatched rows from right table.

Ex. select count(\*) from hr.employees e right outer join

hr.departments d on(e.department\_id=d.department\_id); Ans: 122

Ex. select e.First\_name,d.department\_name,e.department\_id empdeptid,d.department\_id deptid,d.manager\_id from hr.employees e right outer join hr.departments d on(e.department\_id=d.department\_id);

For unmatched rows it simply display as null.

Write a query to fetch empname, deptname and deptid of all the departments with and without employees.\*/

select e.First\_name,e.Last\_name,d.department\_name,e.department\_id from hr.employees e **full outer** join hr.departments d on (e.department\_id=d.department\_id) ;

select e.First\_name,e.Last\_name,d.department\_name,e.department\_id from hr.employees e **left outer** join hr.departments d on (e.department\_id=d.department\_id) ;

select e.First\_name,e.Last\_name,d.department\_name,e.department\_id from hr.employees e **right outer** join hr.departments d on (e.department\_id=d.department\_id) ;

**Self Joins** : some time want to establish the relationships within the same tables.

Three way join : joining between three tables…

Ex: select e.First\_name,l.city,d.department\_name from hr.employees e join hr.departments d on (e.department\_id=d.department\_id) join hr.locations l on (d.location\_id=l.location\_id);

Ex: select e.First\_name,l.city,d.department\_name from hr.employees e join hr.departments d on (e.department\_id=d.department\_id) join hr.locations l on (d.location\_id=l.location\_id) where e.first\_name='Diana';

--get job id, job title and emp name

--select e.first\_name,d.department\_name, e.department\_id empDeptId, d.department\_id deptDeptId from hr.employees e

--right outer join hr.departments d on (e.department\_id=d.department\_id);

--employees without department

--departments without employee

Date : 21st November.

SUB Queries :

Sub queries are the queries with the main query.in oracle sub queries are executed first then main query.single row fuctions like <,>,=,<=,>=,<>

SET Operators : any queries if we want to combine we use set operators.more than one query can be combined.

Different set operators : union,union all,minus,intersection

write a query to select first\_name and hredate of employees who were hired after employee smith

A.select First\_name,Hire\_date from hr.employees where hire\_date > any(select hire\_date from hr.employees where First\_name=’smith’)

query to find employees who report to king

select \* from hr.employees where manager\_id=(select manager\_id where last\_name =’King’ and manager\_id is null);

query to find top salaried employee details in each department

select \* from hr.employees where (salary,department\_id) in( where select max(salary) maxsal from hr.employees group by department\_id);

query to find employee details of second highest salaried person

select \* from hr.employees where salary =(select max(salary) from hr.employees

query to find min sal under each job category in specific  department

22nd,nov,2016

Constraints : rules or restrictions on particular column.

Primary key : it is always unique and not null

Foreign key : FK in one table is the PK in other table and it establishes

relationship between two table

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UNIX