Experiment No. 7

Regd. No. .

Oracle join is used in queries to join two or more tables, columns or view based on the value of related columns or both the tables. For eg: primarykey, of the first time table and foregin keys of the second table are related columns to extract relevant data from database and again based on the requirements joins can be inner join, outer join, left outer join, Right outer join, self join and all of these joins are supported in Oracle database.

Types of Joins:

- Inner joins (also known as simple joins)
- Equi joins
- Outer joins
- Left outer joins (also called as left Joins)
- Right outer joins (also called as Right joins)
- Full outer joins (also called as Full Joins)

Experiment No. Regd. No.

1. INNER JOIN (also known as Simple Join) :-

Inner joins join the multiple tables and return those rows for which the join condition is true.

→ The inner join is the most common join among the types of join.

Syntax :=

```
SELECT column[, column] FROM t1
INNER JOIN t2
ON t1.column = t2.column;
```

→ The below diagram represents the visual representation of the inner join, as in the diagram the shaded area return as the result of the INNER JOIN:

Examples

1) SQL> Select stu1.idno, stu1.sname, stu2.sname, stu2.idno from stu1 inner join stu2 on stu1.idno = stu2.idno;

2) SQL> select emp1.no, emp1.ename, emp2.no, emp2.idno from emp1 inner join emp2 on emp1.no = emp2.no;

① Output :-

IDNO	SNAME
53	BALU
51	Sanju
98	chari

IDNO	SNAME
53	SRI
51	JAI
98	RAM

② output :-

NO	ENAME
1	PRABHAS
2	SAI PALLAVI
3	ANUPAMA

NO	ENAME
1	RANA
2	EMMA
3	JACK

Experiment No. Regd. No.

2. Equi Joins:

Equi joins retrieving the matching column values of the multiple tables. The join condition of the comparison operator present in the WHERE clause of the select statement.

SYNTAX:

SELECT column [,.. column] FROM t1, t2
where t1. column = t2. column;

Example:

1) Select playerID [pname, Pgame, PAddress] FROM P1, P2
where P1. ID = P2. ID;

2) Select EMPID (ename, edept, eage) FROM Emp1, Emp2
where emp1. ID = emp2. ID;

2. Display the details of emp's along with grade of emp's based on salary?

Ex:

1) select Emp1. empid, emp1. ename, dept. Sal from EMP1, dept where EMP1. id = dept. id;

2) select stu. Id, Stu. name, teacher. Sub from stu, teacher where stu. Id = teacher. Id;

② Select stuId, stu.name, teacher.sub from stu, teacher where stu.Id = teacher.Id;

ID	name	sub
5A3	BALU	DBMS
5A0	Naveed	DBMS
598	Chaoli	DBMS

① Select EMP1.empid, emp1.ename, dept.sal from EMP1, dept where EMP.id = dept.id;

empid	name	sal
1	sai	10k
2	pavan	20k
3	Nag	30k
4	sheshu	40k

Experiment No. Regd. No. .

Outer Joins:-

Another type of join which returns a result of an inner join plus all the rows from one table for which the join condition is not true.

SYNTAX:

```
SELECT column[, column] FROM t1
LEFT|RIGHT|FULL[OUTER] JOIN t2
ON t1.column = t2.column;
```

There are three types of outer join as given below:

- Left outer joins (also called as left join)
- Right outer joins (also called as Right joins
- Full outer joins (also called as Full joins).

4. Left Outer Join

The left outer join returns contain all rows from the LEFT table (according to the specified in ON Condition) and from the other table only those rows where the joined Condition is true.

SYNTAX:

```
SELECT column[, column] FROM t1
LETF[OUTER] JOIN t2
ON t1.column = t2.column;
```

Experiment No. Regd. No.

1. Display the details of emp's along with the name is in the emp table?

Example: (1)

```
1. Select emp.id, emp.cname, dept.sal
2 from emp
3 leftouter join department
4 on emp.id = dept.id;
```

(2) select stu1.idno, stu1.age, stu2.name
2: from stu1
3 left outer join stu2
4: on stu1.idno = stu2.idno;

Right Outer Join :=

The RIGHT OUTER JOIN return contain all rows from the RIGHT table (according to the specified in ON Condition) and from the other table only those rows where the joined Condition is true.

SYNTAX:

```
SELECT Column[, Column] FROM t1
RIGHT [OUTER] JOIN t2
ON t1.column = t2.column;
```

① output :-

ID	ENAME	SAL
503	SAI	25k
502	GANESH	35k
501	RAJ	45k

② Output :-

IDNO	SNAME	SAGE
53	BALU	18
98	NAVEED	19
50	Chooti	20.

Experiment No. Regd. No. .

Example:-1

SQL> select emp1.NO, emp1.sal, emp2.ename
2 from emp1
3 right outer join emp2
4 on emp1.NO = emp2.NO;

(2)

SQL> Select stu1.idno, stu1.age, stu2.ename
2 from stu1
3 right outer join stu2
4 on stu1.idno = stu2.idno;

Full outer join :-

The Full outer join returns contain all rows from the LEFT table with null in fields where the join conditions is not true.

SYNTAX :-

SELECT column[, column] FROM t1
FULL [OUTER] JOIN t2
ON t1.column = t2.column;

① Output :-

NO	Sal	Ename
1	25cr	RANA
2	5cr	EMMA
3	10cr	JACK
		TATA.

② Output :-

IDNO	Age	SNAME
53	18	JAI
51	20	SRI
98	21	RAM
		BALAYA

Experiment No. Regd. No. .

example : (1)

```
1) SQL> select stu1.IDNO, stu1.sNAME , stu2.sage
2 From stu1
3 Full outer join stu2
4 on stu1.IdNO = stu2.IDNO;
```

(2)

```
SQL> Select empl.NO, Empl.ENAME, EMP2.sal
2 From Empl
3 Full outer join emp2
4 on Empl.NO = Emp2.NO.
```

(1) output :-

IDNO	SNAME	SAGE
53	BALU	72
50	NAVEED	100
51	SANJU	10000
98	CHARI	50

(2) output :-

NO	ENAME	SAL
1	PRABHAS	15 Cr
2	SAI PALLAVI	1 M
3	ANUPAMA	10 Cr
4	RAJMOULI	100 TM