



DEPARTMENT OF COMPUTER ENGINEERING

EXPERIMENT NO 7

Title: Study and implement different Join operations in SQL.

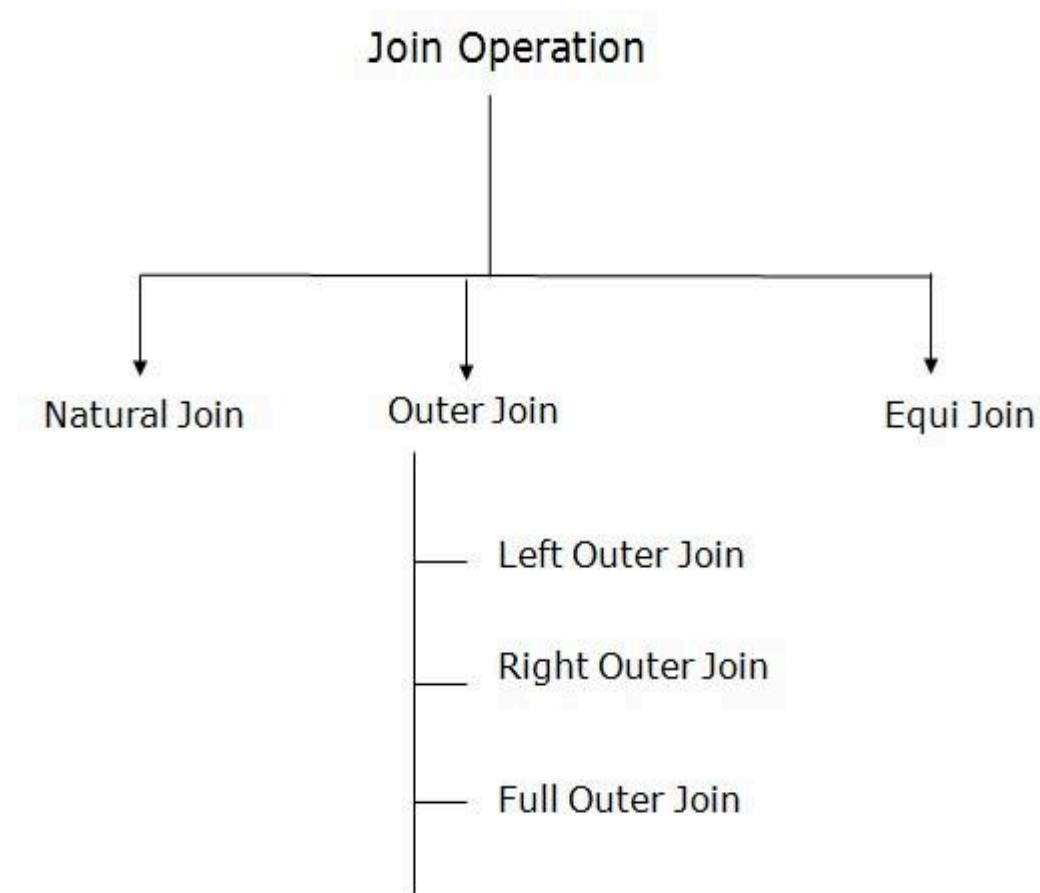
Aim: Perform various Join Operations.

Theory:

Join Operations:

A Join operation combines related tuples from different relations, if and only if a given join condition is satisfied.

Types of Join operations:



Create a table:

```
create a table student (name char(30), regno number(10));
```



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Insert Values:

insert into student values ('hari', 1);

Insert into student values ('subbu', 2);

Insert into student values ('srinu', 3);

Output

Name	Regno
Hari	1
Subbu	2
Srinu	3

Create another table:

Create table marks(regno number(10), total number(10)); **Insert**

values:

insert into marks values (1, 400);

Insert into marks values(2,450);

Insert into marks values (3, 300);

Output

Regno	Total
1	400
2	450
3	300



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1. **Natural join** – If we join two tables on equal condition then it is called natural join or equi join. Generally, join is referred to as natural join.

Syntax:

select columnname(s) from tablename1 join tablename2 on
tablename1.columnname=tablename2.columnname; **Query**

Select * from student join marks on student.regno = marks.regno;

Output

Name	Regno	Regno	Total
Hari	1	1	400
Subbu	2	2	450

2. **Left join** – It is an extension of natural join to deal with missing values of relation.

Query:

Select * from student left join marks on student.regno = marks.regno;

Output

Name	Regno	Regno	Total
Hari	1	1	400
Subbu	2	2	450
Srinu	3	NULL	NULL

3. **Right join** – Here all the tuples of table2 (right table) appear in the output. The mismatching values of table1 are filled with NULL



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Query

Select * from student right join marks on student.regno = marks.regno;

Output

Name	Regno	Regno	Total
Hari	1	1	400
Subbu	2	2	450
NULL	NULL	NULL	NULL

4. Full join – Full outer join=left outer join U right outer join

Query

Select * from student full join marks on student.regno = marks.regno;

Output

Name	Regno	Regno	Total
Hari	1	1	400
Subbu	2	2	450
Srinu	3	NULL	NULL
NULL	NULL	5	350

Conclusion: Hence in this way we have implemented various join Operations such as left join, right join