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BRANCH :- Comps -B. **BATCH:** B.
EXPERIMENT 5: To perform join operation on data.
SUBJECT :- DBMS (DATABASE MANAGEMENT SYSTEM)

```
create database elderlycare;
use elderlycare;
create table ngo(id int primary key, name varchar(20), address varchar(20));
insert into ngo(id, name, address) values (1, "swadesh", "Mahad"),
(2, "manish", "Andheri"), (3, "atharv", "bhoisar"), (4, "vishesh", "thane"), (5, "nipun", "jogeshwari"),
(6, "nishant", "kalyan"), (7, "krunal", "roha"), (8, "om", "panvel"), (9, "shubham", "karjat"),
(10, "samyak", "khopoli");
select * from ngo;

create table companion(id int primary key, name varchar(20), address varchar(20));
insert into companion(id, name, address) values (16, "swadesh", "Mahad"),
(2, "manish", "Andheri"), (3, "atharv", "bhoisar"), (4, "vishesh", "thane"), (5, "nipun", "jogeshwari"),
(6, "nishant", "kalyan"), (7, "krunal", "roha"), (88, "om", "panvel"), (9, "shubham", "karjat"),
(100, "samyak", "khopoli");
select * from companion;

create table companions(id int primary key, name varchar(20), address varchar(20));
insert into companions(id, name, address) values (16, "swadesh", "Mahad"),
(2, "manish", "Andheri"), (3, "atharv", "bhoisar"), (4, "vishesh", "thane");


create table ngo2(id int primary key, name varchar(20), address varchar(20));
insert into ngo2(id, name, address) values (1, "swadesh", "Mahad"),
(2, "manish", "Andheri");
```

1. **Equijoin:**

```
select ngo.id, ngo.name, companion.id, companion.address
from ngo, companion
where ngo.id=companion.id;
```

Result Grid | Filter Rows:

id	name	id	address
2	manish	2	Andheri
3	atharv	3	bhoisar
4	vishesh	4	thane
5	nipun	5	jogeshwari
6	nishant	6	kalyan
7	krunal	7	roha
9	shubham	9	karjat

2. Non-Equijoin:

select ngo.id, ngo.name, companions.id, companions.address

from ngo, companions

where ngo.id<companions.id;

Result Grid | Filter Rows: | Exp

id	name	id	address
1	swadesh	2	Andheri
1	swadesh	3	bhoisar
2	manish	3	bhoisar
1	swadesh	4	thane
2	manish	4	thane
3	atharv	4	thane
1	swadesh	16	Mahad
2	manish	16	Mahad
3	atharv	16	Mahad
4	vishesh	16	Mahad
5	nipun	16	Mahad
6	nishant	16	Mahad
7	krunal	16	Mahad
8	om	16	Mahad
9	shubham	16	Mahad
10	samyak	16	Mahad

3. Selfjoin:

select ngo.name as name1, companion.name as name2, ngo.address

from ngo,companion

where ngo.id<>companion.id

and ngo.address = companion.address

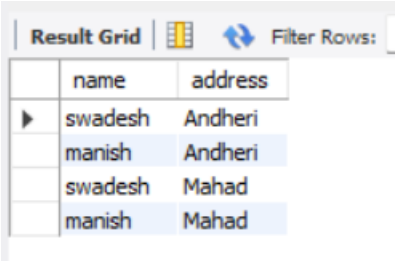
order by ngo.address;

Result Grid | Filter Rows:

name1	name2	address
samyak	samyak	khopoli
swadesh	swadesh	Mahad
om	om	panvel

4. Cross Join:

```
select ngo2.name, companions2.address
from ngo2
cross join companions2;
```



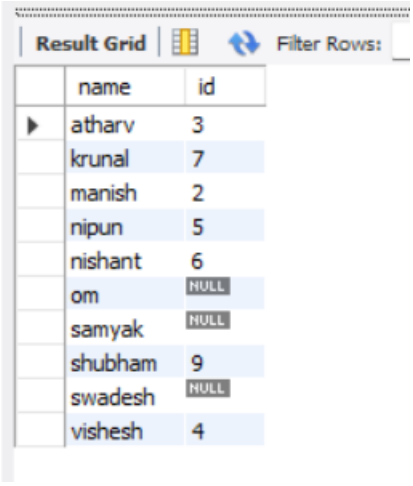
Result Grid | Filter Rows:

name	address
swadesh	Andheri
manish	Andheri
swadesh	Mahad
manish	Mahad

5. Outer Join:

a) Left Outer Join:

```
select ngo.name, companion.id
from ngo
left outer join companion
on
ngo.id=companion.id
order by ngo.name;
```

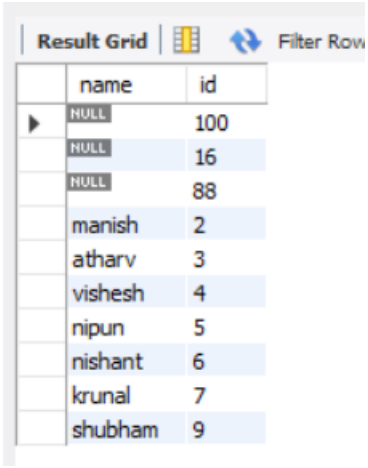


Result Grid | Filter Rows:

name	id
atharv	3
krunal	7
manish	2
nipun	5
nishant	6
om	NULL
samyak	NULL
shubham	9
swadesh	NULL
vishesh	4

b) Right Outer Join:

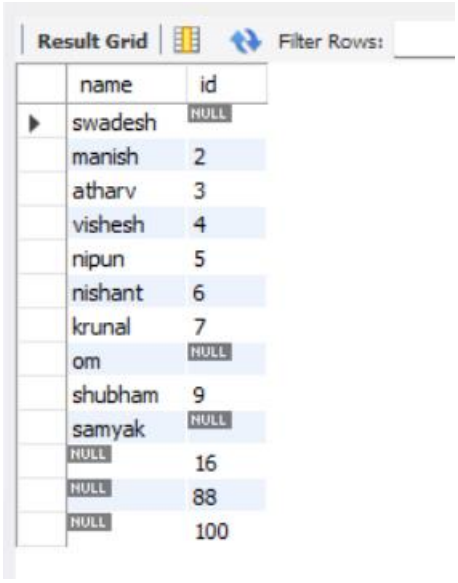
```
select ngo.name, companion.id
from ngo
right outer join companion
on
ngo.id=companion.id
order by ngo.id;
```


Result Grid | Filter Row

name	id
NULL	100
NULL	16
NULL	88
manish	2
atharv	3
vishesh	4
nipun	5
nishant	6
krunal	7
shubham	9

c) Full Outer Join:

```
select ngo.name, companion.id
from ngo
left outer join companion
on
ngo.id=companion.id
union
select ngo.name, companion.id
from ngo
right outer join companion
on
ngo.id=companion.id;
```


Result Grid | Filter Rows:

name	id
swadesh	NULL
manish	2
atharv	3
vishesh	4
nipun	5
nishant	6
krunal	7
om	NULL
shubham	9
samyak	NULL
NULL	16
NULL	88
NULL	100

Conclusion: Hence by completing this experiment I came to know about how to implement Join operations.