

Create table employeee:

```
mysql> select *from employee;
+-----+-----+-----+-----+
| Eid | firstname | lastname | Did |
+-----+-----+-----+-----+
| 1 | srikanth | patel | 10 |
| 2 | vinay | kumar | 20 |
| 3 | ashok | kumar | 30 |
| 4 | abhi | bhai | 40 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

Create table department:

```
mysql> select *from department;
+-----+-----+
| Did | Dname |
+-----+-----+
| 10 | IT |
| 20 | sales |
| 30 | marketing |
| 40 | IT |
+-----+-----+
4 rows in set (0.00 sec)
```

1) INNER JOIN: Query: SELECT e.Eid, e.firstname, e.lastname, d.Dname FROM employee e

INNER JOIN Department d

ON e.Did = d.Did;

Output:

Eid | first_name | last_name | Dname

1	srikanth	patel	IT
2	vinay	kumar	Sales
3	ashok	kumar	marketing
4	abhi	bhai	IT

2) LEFT OUTER JOIN :

Query: SELECT e.Eid, e.firstname, e.lastname, d.Dname FROM employee e
LEFT OUTER JOIN Department d
ON e.Did = d.Did;

Output:

Eid	first_name	last_name	Dname
1	srikanth	patel	IT
2	vinay	kumar	Sales
3	ashok	kumar	marketing
4	abhi	bhai	IT

3) RIGHT OUTER JOIN:

Query: SELECT e.Eid, e.firstname, e.lastname, d.Dname FROM employee e
RIGHT OUTER JOIN Department d
ON e.Eid = d.Did;

Output:

Eid	firstname	lastname	Dname
1	srikanth	patel	IT
4	abhi	bhai	IT
2	vinay	kumar	Sales
3	ashok	kumar	marketing
	NULL	NULL	Marketing

4) FULL OUTER JOIN:

Query: SELECT e.Eid, e.firstname, e.lastname, d.Dname FROM employee e
FULL OUTER JOIN Department d
ON e.Did = d.Did;

Output:

employee_id first_name last_name department_name

1	srikanth	patel	IT
2	vinay	kumar	Sales
3	ashok	kumar	marketing
4	abhi	bhai	IT

NULL NULL NULL Marketing

Employee table:

employee_id| first_name| last_name| email

1	srikanth	patel	sri.pat@example.com
2	vinay	kumar	vinay.km@example.com
3	ashok	kumar	ashu.km@example.com
4	abhi	bahi	abhi.bhi@example.com

1) Based on firstName:

Query: SELECT firstname, COUNT(*)

FROM employee

GROUP BY firstname

HAVING COUNT(*) > 1;

Output:

firstname COUNT(*)

Srikanth 2

2) based on email:

query: SELECT email, COUNT(*)

FROM employee

GROUP BY email

HAVING COUNT(*) > 1;

Output

email COUNT(*)

sri.pat@example.com 2

3) Based on firstname and Last Name:

Query: SELECT firstname, lastname, COUNT(*)

FROM employee

GROUP BY firstname, lastname

HAVING COUNT(*) > 1;

Output:

firstname lastname COUNT(*)

Srikanth patel 2

4) Based on firstname and email:

Query: SELECT firstname, email, COUNT(*)

FROM employee

GROUP BY firstname, email

HAVING COUNT(*) > 1;

Output:

first_name email COUNT(*)

Srikanth john.doe@example.com