

Employee Table

=====

employee_id	first_name	last_name	department_id
1	John	Doe	10
2	Jane	Smith	20
3	Mike	Johnson	30
4	Emily	Davis	10

Department Table

=====

department_id	department_name
10	HR
20	Sales
30	IT
40	Marketing

1)Query for INNER JOIN

```
SELECT
    e.employee_id,
    e.first_name,
    e.last_name,
    d.department_name
FROM
    Employee e
INNER JOIN
    Department d ON e.department_id = d.department_id;
```

output

employee_id	first_name	last_name	department_name
-----			
1	John	Doe	HR
2	Jane	Smith	Sales

3	Mike	Johnson	IT
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4	Emily	Davis	HR
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## 2)Query for LEFT INNER JOIN

```
SELECT e.employee_id, e.first_name, e.last_name, d.department_name
```

```
FROM Employee e
```

```
LEFT OUTER JOIN Department d ON e.department_id = d.department_id;
```

### Output

employee_id	first_name	last_name	department_name
-------------	------------	-----------	-----------------

-----

1	John	Doe	HR
---	------	-----	----

2	Jane	Smith	Sales
---	------	-------	-------

3	Mike	Johnson	IT
---	------	---------	----

4	Emily	Davis	HR
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## 3)Query for RIGHT OUTER JOIN

```
SELECT e.employee_id, e.first_name, e.last_name, d.department_name
```

```
FROM Department d
```

```
RIGHT OUTER JOIN Employee e ON e.department_id = d.department_id;
```

### OUTPUT

employee_id	first_name	last_name	department_name
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-----

1	John	Doe	HR
---	------	-----	----

4	Emily	Davis	HR
---	-------	-------	----

2	Jane	Smith	Sales
---	------	-------	-------

3	Mike	Johnson	IT
---	------	---------	----

NULL	NULL	NULL	Marketing
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## 4)Query for FULL OUTER JOIN

```
SELECT e.employee_id, e.first_name, e.last_name, d.department_name
```

```
FROM Employee e
```

FULL OUTER JOIN Department d ON e.department\_id = d.department\_id;

## OUTPUT

employee\_id | first\_name | last\_name | department\_name

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1	John	Doe	HR
2	Jane	Smith	Sales
3	Mike	Johnson	IT
4	Emily	Davis	HR
NULL	NULL	NULL	Marketing

employee_id	first_name	last_name	email
1	John	Doe	john.doe@example.com
2	Jane	Smith	jane.smith@example.com
3	John	Doe	john.doe@example.com
4	Emily	Davis	<a href="mailto:emily.davis@example.com">emily.davis@example.com</a>

## 1)Query for Duplicate records based on firstName

```
SELECT *  
FROM Employee  
WHERE first_name IN (  
    SELECT first_name  
    FROM Employee  
    GROUP BY first_name  
    HAVING COUNT(*) > 1  
);
```

## 2)Query for Duplicate records based on email

```
SELECT email, COUNT(*)  
FROM Employee  
GROUP BY email  
HAVING COUNT(*) > 1;
```

### **3)Query for Duplicate records based on firstname and lastname**

```
SELECT first_name, last_name, COUNT(*)  
FROM Employee  
GROUP BY first_name, last_name  
HAVING COUNT(*) > 1;
```

### **4)Query for Duplicate records based on firstName and email**

```
SELECT first_name, email, COUNT(*)  
FROM Employee  
GROUP BY first_name, email  
HAVING COUNT(*) > 1;
```