

```
/*
INNER: Matching rows only

LEFT: All left + matching right

RIGHT: All right + matching left

FULL: All rows from both tables

CROSS: All possible combinations
*/
```

```
SELECT *
FROM customers
```

```
SELECT *
FROM orders
```

} No join

```
--INNER JOIN (return only matching rows from both table)
```

① Get all the customers along with their orders,
--including those orders

```
--inner join()
/*
INNER JOIN returns only the rows where there
are common/matching values in both tables based on
the join condition.
*/
SELECT
    c.id,
    c.first_name,
    c.country,
    o.customer_id,
    o.sales
FROM customers AS c
INNER JOIN orders AS o
ON c.id = o.customer_id
```

② Get all the customers along with their orders,
--including those without orders
--all right info(order table) and match data from
(customer table)

--always try to avoid the RIGHT join

```
/*
SELECT
    c.id,
    c.first_name,
    o.order_id,
    o.sales
FROM customers AS c
RIGHT JOIN orders AS o
ON c.id = o.customer_id
```

③ get all the customers from the customer
table and get the match data from the order table
if not match those info will fill with NULL.

```
/*
SELECT
    c.id,
    c.first_name,
    o.order_id,
    o.sales
FROM customers AS c
LEFT JOIN orders AS o
ON c.id = o.customer_id
```

```

/*4) FULL JOIN: get all the customers and all the orders,
even if there's no match
*/
SELECT
    c.id,
    c.first_name,
    o.order_id,
    o.sales
FROM customers AS c
FULL JOIN orders AS o
ON c.id = o.customer_id

```





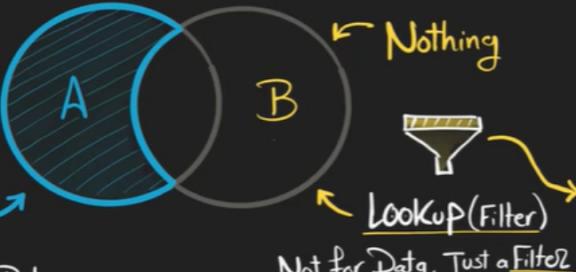
LEFT ANTI JOIN

Returns Row from Left that has No Match in Right

Only UnMatching Rows

Primary

Main Source of Data



Nothing

LookUp(Filter)

Not for Data, Just a Filter

The Order of Tables Is IMPORTANT

SELECT *
FROM A
LEFT JOIN B
ON A.Key = B.Key
WHERE B.Key IS NULL

```

/*
1) left anti join:
Method 1: LEFT JOIN + WHERE IS NULL (Most Common)

*/

```

--Get all the customers who haven't place any order

```

SELECT *
FROM customers c
LEFT JOIN orders o
ON c.id = o.customer_id
WHERE o.customer_id IS NULL

```



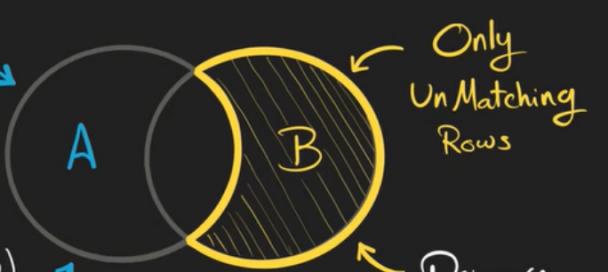
RIGHT ANTI JOIN

Returns Rows from Right that has No Match in Left

Nothing

LookUp(Filter)

Not for Data, Just a Filter



Only UnMatching Rows

Primary

Main Source of Data

The Order of Tables Is IMPORTANT

SELECT *
FROM A
RIGHT JOIN B
ON A.Key = B.Key
WHERE A.Key IS NULL



FULL ANTI JOIN

Returns Only Rows that Dont Match in either Tables



The Order of Tables
Doesn't Matter

SELECT *

FROM A

FULL JOIN B

ON A.Key = B.Key

WHERE

B.Key IS NULL

OR A.Key IS NULL



Only Matching

INNER JOIN



RIGHT
Join ?

All Rows

One Side

Master Table
LEFT JOIN



Both Sides

Both Important
FULL JOIN



Only Unmatching

One Side

Both Side

Master Table
LEFT ANTI JOIN



Both Important
FULL ANTI JOIN



```
/*Task: Using SalesDB, Retrieve a list of all orders, along with the related customer, product  
and employee details. For each order, display:  
Order ID, Customer's name, Product name, Sales, Price, Sales person's name */
```

