

Less Common Joins: Takeaways

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Syntax

- Combining tables using left joins:

```
SELECT *  
FROM some_table  
LEFT JOIN another_table  
ON some_table.some_column = another_table.some_column;
```

- Combining tables using cross joins:

```
SELECT *  
FROM some_table  
CROSS JOIN another_table;
```

- Joining tables on complex conditions:

```
SELECT i1.invoice_id, i1.invoice_date, i1.total,  
       i2.invoice_id AS previous_invoice_id,  
       i2.invoice_date AS previous_invoice_id,  
       i2.total AS previous_total  
FROM invoice i1  
JOIN invoice i2  
ON i1.invoice_id >= i2.invoice_id;
```

Concepts

- A self-join occurs when we join a table with itself.
- An **equi-join** is a join where the join condition is an equality.
- Join conditions don't need to be equalities; they can be anything.
- Cross joins give us all combinations between rows of the intervening tables.

Resources

- [Joins in SQL](#)
- [Running total](#)