Day 5-8

Combining Data

◀ **Joins**

Joins are useful for when you have multiple tables and need to combine them to perform you analysis.

There are many ways to join data. Here are 4 of the most common, **INNER JOIN**, **LEFT JOIN**, **UNION**, and **UNION ALL**.
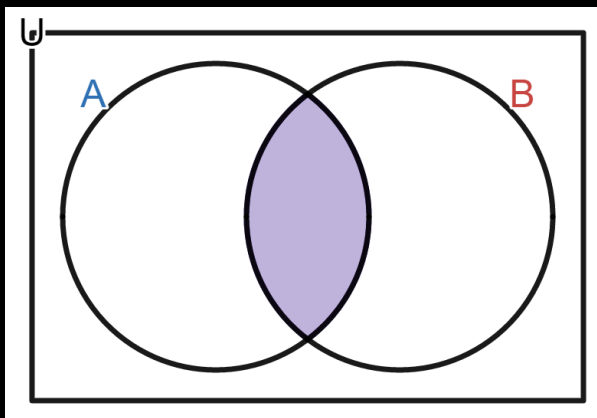
The basic syntax is:

```
SELECT a.*
     , b.*
FROM schema.table a
     JOIN schema.table b on a.id = b.id
```
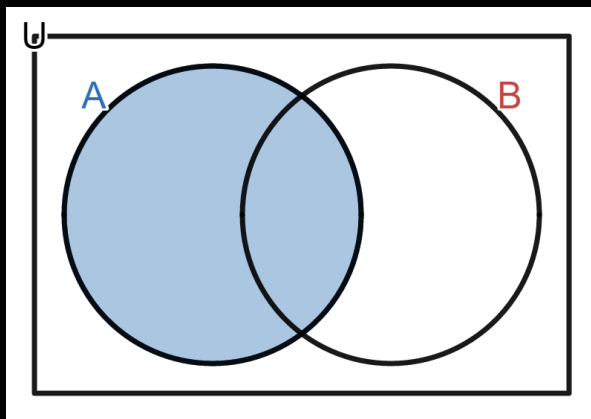
Inner Join

INNER JOIN will join all rows where the specified column matches in both tables.

Left Join

LEFT JOIN will join all rows from the table on the left and any matching rows from the right table.

Union

UNION is not used very often unless there is a very good reason to use it. **UNION** will automatically remove duplicates.

SELECT *
FROM customers

UNION

SELECT *
FROM customers

◀ Union All

UNION ALL is the better of the two unions.
UNION ALL will not remove duplicates.

SELECT *
FROM customers

UNION ALL

SELECT *
FROM customers