To collect data from more than one data source, you can "combine" data sources on one or more common fields using a "Join". The Join type governs the rules by which the data sources will be connected.

**Join Types**

**Left Join**: Combines data source 1 and the intersecting data from source 2.

**Right Join**: Combines data source 2 and the intersecting data from source 1.

**Inner Join**: Results in only data that applies to both sources.

**Full Join**: Results where there is a match(es) on the field(s) joined in either one of the data sources.

**Cross Join**: Combines each record of the first data source with each record of the second, but does not need a common field.
Example

Brianna is ordering four coffees for herself and her coworkers.

Information regarding the four coffees she has ordered are stored in multiple datasets. Dataset 1 describes the type of coffee, dataset 2 describes how much espresso and milk each coffee has, and dataset 3 describes the flavor shots put in each coffee.

<table>
<thead>
<tr>
<th>COFFEE</th>
<th>DETAILS</th>
<th>FLAVORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>type</td>
<td>coffee_id</td>
</tr>
<tr>
<td>1</td>
<td>Latte</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Macchiato</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Cappuchino</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Cortado</td>
<td>4</td>
</tr>
</tbody>
</table>

Here is an Inner Join for all data within the COFFEE and DETAILS tables. Note: The duplicate column for coffee_id displays because it is included in both tables and all columns are selected.

SELECT * from COFFEE INNER JOIN DETAILS ON COFFEE.ID = DETAILS.COFFEE_ID

With this Inner Join, the resulting table displays information on the type of coffee, and the amount of espresso and milk in each cup. There is no duplicate column with the coffee_id as seen in the previous table.

SELECT type,espresso,milk from COFFEE INNER JOIN DETAILS ON COFFEE.ID = DETAILS.COFFEE_ID

This type of Inner Join displays data from all three tables, but excludes the cortado since it does not have any added flavor shots.

SELECT * from COFFEE INNER JOIN DETAILS ON COFFEE.ID = DETAILS.COFFEE_ID INNER JOIN FLAVORS ON COFFEE.ID = FLAVORS.COFFEE_ID

This Left Join would combine all three data sets and include the cortado.