**4) What are the different joins supported by tableau? (With the help of an example create**

**one in tableau)**

Tableau supports several types of joins to combine data from multiple tables. These joins determine how the rows from the joined tables are matched and included in the final result set. Here are the main types of joins supported by Tableau:

**Inner Join:**

* An inner join returns only the rows that have matching values in both tables based on the specified join condition. Rows with no matches in either table are excluded from the result.

**Left Join (Left Outer Join):**

* A left join returns all the rows from the left (primary) table and the matching rows from the right (secondary) table. If there are no matches in the right table, null values are returned for columns from the right table.

**Right Join (Right Outer Join):**

* A right join is similar to a left join but returns all the rows from the right table and the matching rows from the left table. If there are no matches in the left table, null values are returned for columns from the left table.

**Outer Join (Full Outer Join):**

* An outer join returns all rows from both tables, matching rows from both tables, and null values for columns where there is no match. It combines the results of both left and right joins.

**Self-Join:**

* A self-join is a special case where a table is joined with itself. This is often used when working with hierarchical data or when you need to compare rows within the same table.

**Cross Join:**

* A cross join (or Cartesian join) returns the Cartesian product of the two tables. In other words, it combines each row from the first table with every row from the second table. Cross joins can result in a large number of rows and are used less frequently than other join types.

**Natural Join:**

* A natural join automatically matches columns with the same name in both tables. It's not commonly used in Tableau as it can lead to unexpected results, and it's generally recommended to specify join conditions explicitly.

**Data Blending:**

* While not a traditional join, data blending is a technique in Tableau where data from different data sources is combined in the same view. Data blending is based on the relationship between fields in the primary and secondary data sources.

**In Tableau:**

**Prerequisites**: Superstore Data-source provided by Tableau, which includes three tables: orders, people, and returns.

**Orders Table**:

Columns: Order ID, Order Date, Ship Date, Ship Mode, Customer Name, Segment, Country/Region, City, State, Province, Category

**People Table**:

Columns: Regional Manager

**Returns Table**:

Columns: Returned

* Table supports 4 joins - Inner, Left, Right & Full Outer.
* Select two tables that you want to perform an inner join.
* Now we’ve performed an inner join based on the Region.

