Join

Block Group:	Table Operations
Icon:	

The Join block returns a new table that joins the rows of two input tables.

> **Note**
>
> Make sure to rename columns using the **renameColumns** property, if you don't want the columns to be combined.

For information on using dataflow blocks, see Dataflow.

For answers to some common questions about working with tables, see Tables.

Input/Output Properties

The following properties of the Join block can take input and give output.

- input1 *(table)*
- input2 *(table)*
- column1 *(string)*
- column2 *(string)*
- join *(enum)*
- renameColumns *(string)*

input1 specifies the left table for the join operation.

input2 specifies the right table for the join operation.

column1 specifies the name of the key column from the **input1** table.

column2 specifies the name of the key column from the **input2** table.

join determines the method of joining. The value of the **join** property can be one of the following:

- **Left**: All rows from **input1** are included. Rows from **input2** are included and merged when the **column2** value matches a **column1** value.
- **Right**: All rows from **input2** are included. Rows from **input1** are included and merged when the **column1** value matches a **column2** value.
- **Inner**: Rows are included and merged only when the values in **column1** and **column2** are the

same.
- **Full**: All rows from both tables are included, and the rows are merged if the values of **column1** and **column2** are the same.
- **Union**: All rows from both tables are included in a new table. Rows are not merged.

renameColumns determines the names in the output table for columns that come from **input2**. Use this syntax:

```
column1:newName
column2:newName
```

To edit text in a popup window, click the ⊞ **Edit in Window** icon. To create line breaks between columns, press Alt + Enter in the block properties panel, or press Enter in the popup window.

Output Property

The following property of the Join block can give output but cannot take input.

- output *(table)*

output returns the joined table.

Order of Priority for Duplicate Column Names

If column names are the same and are not renamed using the **renameColumns** property, the type of join determines the order of priority, as follows:

- In a left, inner, or full join, the value in the **input1** table overrides the value in the **input2** table.
- In a right join, the value in the **input2** table overrides the value in the **input1** table.
- In a union join, all values are included.

Example

The following image shows an example of the Join block. In this example, a left join operation is performed.

Previous: Group By

Next: Multi-Join