

# Select Syntax

The SELECT syntax is essentially a JSON representation of the MySQL `SELECT` syntax. See the [MySQL documentation](#) for more detailed information.

## SELECT

The SELECT syntax is contained in a single JSON object.

Property	Value	Notes
distinct	<code>boolean</code> , default <code>false</code>	If <code>true</code> , only returns unique values
columns	<a href="#">result columns</a>	If empty, returns all columns available from source
from	<a href="#">source</a>	Source being selected from
where	<a href="#">expression</a>	Condition for rows, where expression returns <code>true</code>
group	<code>array</code> of <a href="#">expressions</a>	Used to group rows for aggregation functions
having	<a href="#">expression</a>	Like <code>where</code> , but can filter aggregation results
order	<code>array</code> of <a href="#">order terms</a>	Used to sort the results
limit	<a href="#">expression</a>	Limit the number of rows returned
offset	<a href="#">expression</a>	Offset of the start of the rows

## Result Columns

Specifies the column(s) to select.

### All

Specifies all columns from the source. This is the same as the MySQL `SELECT *` syntax. This is the default if no value for the `columns` property is set.

Property	Value
<code>type</code>	<code>"all"</code>

*Example*

```
{ "type": "all" }
```

## Array

Specifies column(s) as an array of [result column](#) objects. This is provided directly as a JSON array.

*Example as JSON array:*

```
[ ... ]
```

## Result Column

Specifies an expression and optional alias. The alias can be referenced in the where clause with an alias expression.

Property	Value
<code>e</code>	<a href="#">expression</a>
<code>alias</code>	<code>string</code> (optional)

## Source

A source is a SQL table (or virtual table) from which a `SELECT` statement loads data.

## Table Source

A source from any table.

Property	Value
<code>type</code>	<code>"table"</code>
<code>table</code>	<code>string</code> table
<code>alias</code>	<code>string</code> (optional)

The table syntax is the same as the table portion of the [column expression syntax](#)

```
table = system-table-name | database-table  
database-table = database-path ['@' database-table-name]
```

May also be provided directly as a JSON string (without the `alias` property).

# System Table Source

Deprecated

A source from a system table.

Property	Value
type	"table_system" or "ts"
table	string table name
alias	string (optional)

# Database Table Source

A source from a database table.

Property	Value
type	"table_database" or "td"
database	<a href="#">database specifier</a>
table	string table name
alias	string (optional)

# Join Source

A source derived from a SQL join of two sources.

Property	Value
type	"join"
op	"join", "left", "left_outer", "inner", or "cross"
s1	left join <a href="#">source</a>
s2	right join <a href="#">source</a>

# Select Source

Source from the result of a select statement.

Property	Value
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type	"select"
select	select

# Order Term

Specifies an expression and optional order.

Property	Value
e	expression
order	"asc" or "desc" (optional, default "asc")

Revision #10

Created 9 June 2022 16:28:55 by Nick Dobson

Updated 15 January 2026 20:43:45 by Bradley Tse