

# DENSERANK Function

Computes the rank of an ordered set of value within groups. Tie values are assigned the same rank, and the next ranking is incremented by 1.

- Rank values start at 1 and increment.
- Ranking order varies depending on the data type of the source data. For more information, see *Sort Order*.
- You must use the `group` and `order` parameters to define the groups of records and the order of those records to which this function is applied.
- This function works with the following transforms:
  - *Window Transform*
  - *Set Transform*
  - *Derive Transform*
- This function assigns ranking of the next value of a set of ties as a single increment more. For more discrete ranking, see *RANK Function*.

**Wrangle vs. SQL:** This function is part of Wrangle , a proprietary data transformation language. Wrangle is not SQL. For more information, see *Wrangle Language*.

## Basic Usage

```
denserank() order:Times group:Racer
```

**Output:** Returns the dense ranking of `Times` values, grouped by the `Racer` column.

## Syntax and Arguments

```
denserank() order: order_col group: group_col
```

For more information on the `order` and `group` parameters, see *Window Transform*.

For more information on syntax standards, see *Language Documentation Syntax Notes*.

## Examples

**Tip:** For additional examples, see *Common Tasks*.

## Example - Rank Functions

This example demonstrates the following two functions:

- **RANK** - Generates a ranked order of values, ranked within a group.
  - If there are three tie values in a group, the next ranking is three more than the tie values.
  - See *RANK Function*.
- **DENSERANK** - Generates a ranked order of values, ranked within a group.
  - If there are three tie values in a group, the next ranking is one more than the tie values.
  - See *DENSERANK Function*.

### Source:

The following dataset contains lap times for three racers in a four-lap race. Note that for some racers, there are tie values for lap times.

Runner	Lap	Time
--------	-----	------

Dave	1	72.2
Dave	2	73.31
Dave	3	72.2
Dave	4	70.85
Mark	1	71.73
Mark	2	71.73
Mark	3	72.99
Mark	4	70.63
Tom	1	74.43
Tom	2	70.71
Tom	3	71.02
Tom	4	72.98

**Transformation:**

You can apply the RANK ( ) function to the Time column, grouped by individual runner:

<b>Transformation Name</b>	Window
<b>Parameter: Formulas</b>	RANK ( )
<b>Parameter: Group by</b>	Runner
<b>Parameter: Order by</b>	Time

You can use the DENSERANK ( ) function on the same column, grouping by runner:

<b>Transformation Name</b>	Window
<b>Parameter: Formulas</b>	DENSERANK ( )
<b>Parameter: Group by</b>	Runner
<b>Parameter: Order by</b>	Time

**Results:**

After renaming the columns, you have the following output:

Runner	Lap	Time	Rank	Rank-Dense
Mark	4	70.63	1	1
Mark	1	71.73	2	2
Mark	2	71.73	2	2
Mark	3	72.99	4	3
Tom	2	70.71	1	1
Tom	3	71.02	2	2
Tom	4	72.98	3	3

Tom	1	74.43	4	4
Dave	4	70.85	1	1
Dave	1	72.2	2	2
Dave	3	72.2	2	2
Dave	2	73.31	4	3