RAND Function

The `RAND` function generates a random real number between 0 and 1. The function accepts an optional integer parameter, which causes the same set of random numbers to be generated with each job execution.

- This function generates values of Decimal type with fifteen digits of precision after the decimal point. If you want to see all digits in the generated value, you might need to apply a different number format. See *NUMFORMAT Function*.
- New random numbers are generated within the browser, after each browser refresh, and between subsequent job executions.

Optionally, you can insert an integer as a parameter.

- When this value is present, this **seed value** is used as part of the random number generator such that its output is a set of pseudo-random values, which are consistent between job executions.
- When the browser is refreshed, the random numbers remain consistent when the seed value is present.

Basic Usage

```
derive type:single value: RAND() as:'random'
```

Output: For each row, generate a random number between 0 and 1 in the new `random` function.

Syntax and Arguments

There are no arguments for this function.

Examples

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

Example - Random values

In the following example, the `random` column is generated by the `RAND` function:

```
derive type:single value:RAND() as:'random'
```

source	random
A	0.516845703365675
B	0.71118736300207
C	0.758686066027118
D	0.640146255791255

Example - Type check functions

The `RAND` function is typically used to introduce randomness of some kind in your data. In the following example, it is used to perform sampling within your wider dataset.

> ✅ **Tip:** Keep in mind that for larger datasets the application displays only a sample of them. This method of randomization is applied to the full dataset during job execution.

Source:

You want to extract a random sample of 20% of your set of orders for further study:

OrderId	Qty	ProdId
1001	30	Widgets
1002	10	Big Widgets
1003	5	Big Widgets
1004	40	Widgets
1005	80	Tiny Widgets
1006	20	Widgets
1007	100	Tiny Widgets

Transform:

You can use the following transform to generate a random integer from one to 10:

```
derive type:single value:round(RAND() * 10) as:'random'
```

You can now use the following transform to keep only the rows that contain random values that are in the top 20%, where the value is `9` or `10`:

```
keep row:(random > 8)
```

Results:

> ⓘ **NOTE:** Since the results are randomized, your results might vary.

OrderId	Qty	ProdId	random
1005	80	Tiny Widgets	9
1007	100	Tiny Widgets	10