Statastic

extractColumn

Extracts a specific column from the given dataset based on the column.

Parameters

```
extractColumn(
  data: array,
  colId: int
) -> array
```

```
data array
```

The dataset.

```
colId int
```

The identifier for the column to be extracted.

tofloatArray

Converts an array's elements to floating point numbers.

Parameters

```
tofloatArray(arr: array) -> array
```

```
arr
array
```

Array with elements to be converted.

toIntArray

Converts an array's elements to integers.

Parameters

```
toIntArray(arr: array) -> array
```

```
arr
array
```

Array with elements to be converted.

isInt

Determines if a given value is an integer.

```
isInt(val: mixed) -> boolean
```

val mixed

The value to be checked.

lerp

Calculates a value between two numbers at a specific fraction.

Parameters

```
lerp(
  lower: float,
  upper: float,
  fraction: float
) -> float
```

lower float

The lower number.

upper float

The upper number.

fraction float

The fraction between the two numbers.

arrayAvg

Calculates the average of an array's elements.

Parameters

```
arrayAvg(arr: array) -> float
```

arr array

Array of numbers.

avg

Calculates the average of a specific column in a dataset.

```
avg(
  data: array,
  colld: int
) -> float
```

data array

The dataset.

colId int

The identifier for the column.

arrayMedian

Calculates the median of an array's elements.

Parameters

```
arrayMedian(arr: array) -> float
```

arr array

Array of numbers.

median

Calculates the median of a specific column in a dataset.

Parameters

```
median(
  data: array,
  colId: int
) -> float
```

data array

The dataset.

colId int

The identifier for the column.

array Int Mode

Calculates the mode of an integer array.

```
arrayIntMode(arr: array) -> array
```

```
arr
array
```

Array of integers.

mode

Calculates the mode of a specific column in a dataset.

Parameters

```
mode(
  data: array,
  colId: int
) -> array
```

data array

The dataset.

colId int

The identifier for the column.

arrayVar

Calculates the variance of an array's elements.

Parameters

```
arrayVar(arr: array) -> float
```

arr array

Array of numbers.

var

Calculates the variance of a specific column in a dataset.

Parameters

```
var(
  data: array,
  colld: int
) -> float
```

data array

The dataset.

```
colId int
```

The identifier for the column.

arrayStd

Calculates the standard deviation of an array's elements.

Parameters

```
arrayStd(arr: array) -> float
```

```
arr
array
```

Array of numbers.

std

Calculates the standard deviation of a specific column in a dataset.

Parameters

```
std(
  data: array,
  colId: int
) -> float
```

data array

The dataset.

colId int

The identifier for the column.

arrayPercentile

Calculates a specific percentile of an array's elements.

Parameters

```
arrayPercentile(
  arr: array,
  p: float
) -> float
```

arr array

Array of numbers.

p float

The desired percentile (between 0 and 1).

percentile

Calculates a specific percentile of a column in a dataset.

Parameters

```
percentile(
  data: array,
  colId: int,
  p: float
) -> float
```

data array

The dataset.

colId int

The identifier for the column.

p float

The desired percentile (between 0 and 1).

arrayStats

Computes a set of statistical measures for an array.

Parameters

```
arrayStats(arr: array) -> dictionary
```

arr array

Array of numbers.

stats

Computes a set of statistical measures for a specific column in a dataset.

```
stats(
  data: array,
  colId: int
) -> dictionary
```

data array

The dataset.

colId int

The identifier for the column.