

## Access.Database

Returns a structural representation of an Microsoft Access database.

Syntax: Access.Database(database as binary, optional options as nullable record) as table

## AccessControlEntry.ConditionTolIdentities

Returns a list of identities that the condition will accept.

Syntax: AccessControlEntry.ConditionTolIdentities(identityProvider as function, condition as function) as

## AccessControlKind.Allow

Access is allowed.

Value: 1

## AccessControlKind.Deny

Access is denied.

Value: 0

## ActiveDirectory.Domains

Returns a list of Active Directory domains in the same forest as the specified domain or of the current machine's domain if none is specified.

Syntax: ActiveDirectory.Domains(optional forestRootDomainName as nullable text) as table

## AdobeAnalytics.Cubes

Returns the report suites in Adobe Analytics.

Syntax: AdobeAnalytics.Cubes(optional options as nullable record) as table

## AdoDotNet.DataSource

Returns the schema collection for an ADO.NET data source.

Syntax: AdoDotNet.DataSource(providerName as text, connectionString as any, optional options as nullable

## AdoDotNet.Query

Returns the schema collection for an ADO.NET data source.

Syntax: AdoDotNet.Query(providerName as text, connectionString as any, query as text, optional options as

## AnalysisServices.Database

Returns a table of multidimensional cubes or tabular models from the Analysis Services database.

Syntax: AnalysisServices.Database(server as text, database as text, optional options as nullable record)

## AnalysisServices.Databases

Returns the Analysis Services databases on a particular host.

Syntax: AnalysisServices.Databases(server as text, optional options as nullable record) as table

## AzureStorage.BlobContents

Returns the content of the specified blob from an Azure storage vault.

Syntax: AzureStorage.BlobContents(url as text, optional options as nullable record) as binary

## AzureStorage.Blobs

Returns a navigational table containing all containers found in the Azure Storage account. Each row has the container name and a link to the container blobs.

Syntax: `AzureStorage.Blobs(account as text, optional options as nullable record) as table`

## AzureStorage.DataLake

Returns a navigational table containing the documents found in the specified container and its subfolders from Azure Data Lake Storage.

Syntax: `AzureStorage.DataLake(endpoint as text, optional options as nullable record) as table`

## AzureStorage.DataLakeContents

Returns the content of the specified file from an Azure Data Lake Storage filesystem.

Syntax: `AzureStorage.DataLakeContents(url as text, optional options as nullable record) as binary`

## AzureStorage.Tables

Returns a navigational table containing a row for each table found at the account URL from an Azure storage vault. Each row contains a link to the azure table.

Syntax: `AzureStorage.Tables(account as text) as table`

## Binary.Buffer

Buffers the binary value in memory. The result of this call is a stable binary value, which means it will have a deterministic length and order of bytes.

Syntax: `Binary.Buffer(binary as nullable binary) as nullable binary`

Example: `Binary.Buffer(Binary.FromList({0..10}))`

Answer: `#binary({0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10})`

## Binary.Combine

Combines a list of binaries into a single binary.

Syntax: `Binary.Combine(binaries as list) as binary`

## Binary.Compress

Compresses a binary value using the given compression type.

Syntax: `Binary.Compress(binary as nullable binary, compressionType as number) as nullable binary`

Example: `Binary.Compress(Binary.FromList(List.Repeat({10}, 1000)), Compression.Deflate)`

Answer: `#binary({227, 226, 26, 5, 163, 96, 20, 12, 119, 0, 0})`

## Binary.Decompress

Decompresses a binary value using the given compression type.

Syntax: `Binary.Decompress(binary as nullable binary, compressionType as number) as nullable binary`

Example: `Binary.Decompress(#binary({115, 103, 200, 7, 194, 20, 134, 36, 134, 74, 134, 84, 6, 0}), Compression.Deflate)`

Answer: `#binary({71, 0, 111, 0, 111, 0, 100, 0, 98, 0, 121, 0, 101, 0})`

## Binary.From

Returns a binary value from the given value.

Syntax: `Binary.From(value as any, optional encoding as nullable number) as nullable binary`

Example: `Binary.From("1011")`

Answer: `Binary.FromText("1011", BinaryEncoding.Base64)`

## Binary.FromList

Converts a list of numbers into a binary value

Syntax: Binary.FromList(list as list) as binary

## Binary.FromText

Decodes data from a text form into binary.

Syntax: Binary.FromText(text as nullable text, optional encoding as nullable number) as nullable binary

Example: Binary.FromText("1011")

Answer: Binary.FromText("1011", BinaryEncoding.Base64)

Example: Binary.FromText("1011", BinaryEncoding.Hex)

Answer: Binary.FromText("EBE=", BinaryEncoding.Base64)

## Binary.InferContentType

Returns a record with field Content.Type that contains the inferred MIME-type.

Syntax: Binary.InferContentType(source as binary) as record

## Binary.Length

Returns the length of binary values.

Syntax: Binary.Length(binary as nullable binary) as nullable number

## Binary.ToList

Converts a binary value into a list of numbers

Syntax: Binary.ToList(binary as binary) as list

## Binary.ToText

Encodes binary data into a text form.

Syntax: Binary.ToText(binary as nullable binary, optional encoding as nullable number) as nullable text

## BinaryEncoding.Base64

Constant to use as the encoding type when base-64 encoding is required.

Value: 0

## BinaryEncoding.Hex

Constant to use as the encoding type when hexadecimal encoding is required.

Value: 1

## BinaryFormat.7BitEncodedSignedInteger

A binary format that reads a 64-bit signed integer that was encoded using a 7-bit variable-length encoding.

Syntax: BinaryFormat.7BitEncodedSignedInteger(binary as binary) as any

## BinaryFormat.7BitEncodedUnsignedInteger

A binary format that reads a 64-bit unsigned integer that was encoded using a 7-bit variable-length encoding.

Syntax: BinaryFormat.7BitEncodedUnsignedInteger(binary as binary) as any

## BinaryFormat.Binary

Returns a binary format that reads a binary value.

Syntax: BinaryFormat.Binary(optional length as any) as function

## BinaryFormat.Byte

A binary format that reads an 8-bit unsigned integer.

Syntax: `BinaryFormat.Byte(binary as binary) as any`

## BinaryFormat.ByteOrder

Returns a binary format with the byte order specified by a function.

Syntax: `BinaryFormat.ByteOrder(binaryFormat as function, byteOrder as number) as function`

## BinaryFormat.Choice

Returns a binary format that chooses the next binary format based on a value that has already been read.

Syntax: `BinaryFormat.Choice(binaryFormat as function, chooseFunction as function, optional type as`

Example: `let binaryData = #binary({2, 3, 4, 5}), listFormat = BinaryFormat.Choice( BinaryFormat.Byte, (length) =>`

Answer: `BinaryFormat.List(BinaryFormat.Byte, length)) in listFormat(binaryData)`

Example: `let binaryData = #binary({2, 3, 4, 5}), listFormat = BinaryFormat.Choice( BinaryFormat.Byte, (length) =>`

Answer: `BinaryFormat.Record([ length = length, list = BinaryFormat.List(BinaryFormat.Byte, length) ])) in`

Example: `let binaryData = #binary({2, 3, 4, 5}), listFormat = BinaryFormat.Choice( BinaryFormat.Byte, (length) =>`

Answer: `BinaryFormat.List(BinaryFormat.Byte, length), type list) in listFormat(binaryData)`

## BinaryFormat.Decimal

A binary format that reads a .NET 16-byte decimal value.

Syntax: `BinaryFormat.Decimal(binary as binary) as any`

## BinaryFormat.Double

A binary format that reads an 8-byte IEEE double-precision floating point value.

Syntax: `BinaryFormat.Double(binary as binary) as any`

## BinaryFormat.Group

Returns a binary format that reads a group of items. Each item value is preceded by a unique key value. The result is a list of item values.

Syntax: `BinaryFormat.Group(binaryFormat as function, group as list, optional extra as nullable function,`

Example: Key 1 is required, and does appear with value 11.

Answer: Key 2 repeats, and appears twice with value 22, and results in a value of { 22, 22 }.

Example: `let b = #binary( { 1, 101, 1, 102 } ), f = BinaryFormat.Group( BinaryFormat.Byte, { { 1, BinaryFormat.Byte,`

Answer: `BinaryOccurrence.Repeating, 0, (list) => List.Sum(list) }, { 2, BinaryFormat.Byte, BinaryOccurrence.Optional,`

## BinaryFormat.Length

Returns a binary format that limits the amount of data that can be read. Both `BinaryFormat.List` and `BinaryFormat.Binary` can be used to read until end of the data. `BinaryFormat.Length` can be used to limit the number of bytes that are read.

Syntax: `BinaryFormat.Length(binaryFormat as function, length as any) as function`

Example: `let binaryData = #binary({1, 2, 3}), listFormat = BinaryFormat.Length(`

`BinaryFormat.List(BinaryFormat.Byte),`

Answer: `2) in listFormat(binaryData)`

Example: let binaryData = #binary({1, 2, 3}), listFormat = BinaryFormat.Length(  
BinaryFormat.List(BinaryFormat.Byte),  
Answer: BinaryFormat.Byte) in listFormat(binaryData)

### BinaryFormat.List

Returns a binary format that reads a sequence of items and returns a list.

Syntax: BinaryFormat.List(binaryFormat as function, optional countOrCondition as any) as function

Example: let binaryData = #binary({1, 2, 3}), listFormat = BinaryFormat.List(BinaryFormat.Byte) in

Answer: listFormat(binaryData)

Example: let binaryData = #binary({1, 2, 3}), listFormat = BinaryFormat.List(BinaryFormat.Byte, 2) in

Answer: listFormat(binaryData)

Example: let binaryData = #binary({1, 2, 3}), listFormat = BinaryFormat.List(BinaryFormat.Byte, (x) =>  
x < 2) in

Answer: listFormat(binaryData)

### BinaryFormat.Null

A binary format that reads zero bytes and returns null.

Syntax: BinaryFormat.Null(binary as binary) as any

### BinaryFormat.Record

Returns a binary format that reads a record. Each field in the record can have a different binary format.

Syntax: BinaryFormat.Record(record as record) as function

Example: let binaryData = #binary({ 0x00, 0x01, 0x00, 0x00, 0x00, 0x02}), recordFormat =

BinaryFormat.Record([ A =

Answer: BinaryFormat.UnsignedInteger16, B = BinaryFormat.UnsignedInteger32 ]) in  
recordFormat(binaryData)

### BinaryFormat.SignedInteger16

A binary format that reads a 16-bit signed integer.

Syntax: BinaryFormat.SignedInteger16(binary as binary) as any

### BinaryFormat.SignedInteger32

A binary format that reads a 32-bit signed integer.

Syntax: BinaryFormat.SignedInteger32(binary as binary) as any

### BinaryFormat.SignedInteger64

A binary format that reads a 64-bit signed integer.

Syntax: BinaryFormat.SignedInteger64(binary as binary) as any

### BinaryFormat.Single

A binary format that reads a 4-byte IEEE single-precision floating point value.

Syntax: BinaryFormat.Single(binary as binary) as any

### BinaryFormat.Text

Returns a binary format that reads a text value. The optional encoding value specifies the encoding of the text.

Syntax: BinaryFormat.Text(length as any, optional encoding as nullable number) as function

Example: let binaryData = #binary({65, 66, 67}), textFormat = BinaryFormat.Text(2,

TextEncoding.Ascii) in

Answer: textFormat(binaryData)

Example: let binaryData = #binary({2, 65, 66}), textFormat = BinaryFormat.Text(BinaryFormat.Byte, TextEncoding.Ascii)

Answer: in textFormat(binaryData)

### BinaryFormat.Transform

Returns a binary format that will transform the values read by another binary format.

Syntax: BinaryFormat.Transform(binaryFormat as function, function as function) as function

Example: let binaryData = #binary({1}), transformFormat = BinaryFormat.Transform(BinaryFormat.Byte, (x) => x + 1) in

Answer: transformFormat(binaryData)

### BinaryFormat.UnsignedInteger16

A binary format that reads a 16-bit unsigned integer.

Syntax: BinaryFormat.UnsignedInteger16(binary as binary) as any

### BinaryFormat.UnsignedInteger32

A binary format that reads a 32-bit unsigned integer.

Syntax: BinaryFormat.UnsignedInteger32(binary as binary) as any

### BinaryFormat.UnsignedInteger64

A binary format that reads a 64-bit unsigned integer.

Syntax: BinaryFormat.UnsignedInteger64(binary as binary) as any

### BinaryOccurrence.Optional

The item is expected to appear zero or one time in the input.

Value: 0

### BinaryOccurrence.Repeating

The item is expected to appear zero or more times in the input.

Value: 2

### BinaryOccurrence.Required

The item is expected to appear once in the input.

Value: 1

### Byte.From

Returns a 8-bit integer number value from the given value.

Syntax: Byte.From(value as any, optional culture as nullable text, optional roundingMode as nullable

Example: Byte.From("4")

Answer: 4

Example: Byte.From("4.5", null, RoundingMode.AwayFromZero)

Answer: 5

### ByteOrder.BigEndian

A possible value for the byteOrder parameter in BinaryFormat.ByteOrder. The most significant byte appears first in Big Endian byte order.

Value: 1

### ByteOrder.LittleEndian

A possible value for the byteOrder parameter in BinaryFormat.ByteOrder. The least significant byte appears first in Little Endian byte order.

Value: 0

### Character.FromNumber

Returns a number to its character value.

Syntax: Character.FromNumber(number as nullable number) as nullable text

Example: Character.FromNumber(9)

### Character.ToNumber

Returns a character to its number value.

Syntax: Character.ToNumber(character as nullable text) as nullable number

Example: Character.ToNumber("#(tab)")

### Combiner.CombineTextByDelimiter

Returns a function that combines a list of text into a single text using the specified delimiter.

Syntax: Combiner.CombineTextByDelimiter(delimiter as text, optional quoteStyle as nullable number) as

### Combiner.CombineTextByEachDelimiter

Returns a function that combines a list of text into a single text using each specified delimiter in sequence.

Syntax: Combiner.CombineTextByEachDelimiter(delimiters as list, optional quoteStyle as nullable number) as

### Combiner.CombineTextByLengths

Returns a function that combines a list of text into a single text using the specified lengths.

Syntax: Combiner.CombineTextByLengths(lengths as list, optional template as nullable text) as function

### Combiner.CombineTextByPositions

Returns a function that combines a list of text into a single text using the specified positions.

Syntax: Combiner.CombineTextByPositions(positions as list, optional template as nullable text) as function

### Combiner.CombineTextByRanges

Returns a function that combines a list of text into a single text using the specified positions and lengths.

Syntax: Combiner.CombineTextByRanges(ranges as list, optional template as nullable text) as function

### Comparer.Equals

Returns a logical value based on the equality check over the two given values.

Syntax: Comparer.Equals(comparer as function, x as any, y as any) as logical

Example: Comparer.Equals(Comparer.FromCulture("en-us"), "1", "A")

### Comparer.FromCulture

Returns a comparer function given the culture and a logical value for case sensitivity for the comparison. The default value for ignoreCase is false. The value for culture are well known text representations of locales used in the .NET framework.

Syntax: Comparer.FromCulture(culture as text, optional ignoreCase as nullable logical) as function

Example: Comparer.FromCulture("en-us")("a", "A")

Example: Comparer.FromCulture("en-us", true)("a", "A")

### Comparer.Ordinal

Returns a comparer function which uses Ordinal rules to compare values.

Syntax: `Comparer.Ordinal(x as any, y as any) as number`

Example: `Comparer.Equals(Comparer.Ordinal, "encyclopdia", "encyclopaedia")`

Answer: FALSE

### Comparer.OrdinalIgnoreCase

Returns a case-insensitive comparer function which uses Ordinal rules to compare the provided values x and y.

Syntax: `Comparer.OrdinalIgnoreCase(x as any, y as any) as number`

### Compression.Deflate

The compressed data is in the 'Deflate' format.

Value: 1

### Compression.GZip

The compressed data is in the 'GZip' format.

Value: 0

### Csv.Document

Returns the contents of a CSV document as a table using the specified encoding.

Syntax: `Csv.Document(source as any, optional columns as any, optional delimiter as any, optional`

Example: `Table.PromoteHeaders(Csv.Document("OrderID,Item 1,Fishing rod 2,1 lb. worms"))`

Answer: ORDERID ITEM

### CsvStyle QuoteAfterDelimiter

Quotes in a field are only significant immediately following the delimiter.

Syntax: `CsvStyle.QuoteAfterDelimiter`

Value: 0

### CsvStyle.QuoteAlways

Quotes in a field are always significant regardless of where they appear.

Syntax: `CsvStyle.QuoteAlways`

Value: 1

### Cube.AddAndExpandDimensionColumn

Merges the specified dimension table, dimensionSelector, into the cube's, cube, filter context and changes the dimensional granularity by expanding the specified set, attributeNames, of dimension attributes.

Syntax: `Cube.AddAndExpandDimensionColumn(**cube** as table, **dimensionSelector** as any,`

### Cube.AddMeasureColumn

Adds a column with the name column to the cube that contains the results of the measure measureSelector applied in the row context of each row.

Syntax: `Cube.AddMeasureColumn(**cube** as table, **column** as text, **measureSelector** as any) as table`

### Cube.ApplyParameter

Returns a cube after applying parameter with arguments to cube.

Syntax: `Cube.ApplyParameter(cube as table, parameter as any, optional arguments as nullable list) as table`



### Cube.AttributeMemberId

Returns the unique member identifier from a member property value.

Syntax: `Cube.AttributeMemberId(attribute as any) as any`

### Cube.AttributeMemberProperty

Returns the property `propertyName` of dimension attribute attribute.

Syntax: `Cube.AttributeMemberProperty(attribute as any, propertyName as text) as any`

### Cube.CollapseAndRemoveColumns

Changes the dimensional granularity of the filter context for the cube by collapsing the attributes mapped to the specified columns `columnNames`.

Syntax: `Cube.CollapseAndRemoveColumns(**cube** as table, **columnNames** as list) as table`

### Cube.Dimensions

Returns a table containing the set of available dimensions within the cube.

Syntax: `Cube.Dimensions(**cube** as table) as table`

### Cube.DisplayFolders

Returns a nested tree of tables representing the display folder hierarchy of the objects (e.g. dimensions and measures) available for use in the cube.

Syntax: `Cube.DisplayFolders(**cube** as table) as table`

### Cube.MeasureProperties

Returns a table containing the set of available properties for measures that are expanded in the cube.

Syntax: `Cube.MeasureProperties(cube as table) as table`

### Cube.MeasureProperty

Returns the property of a measure.

Syntax: `Cube.MeasureProperty(measure as any, propertyName as text) as any`

### Cube.Measures

Returns a table containing the set of available measures within the cube.

Syntax: `Cube.Measures(**cube** as any) as table`

### Cube.Parameters

Returns a table containing the set of parameters that can be applied to cube.

Syntax: `Cube.Parameters(cube as table) as table`

### Cube.Properties

Returns a table containing the set of available properties for dimensions that are expanded in the cube.

Syntax: `Cube.Properties(cube as table) as table`

### Cube.PropertyKey

Returns the key of property property.

Syntax: `Cube.PropertyKey(property as any) as any`

### Cube.ReplaceDimensions

0

Syntax: `Cube.ReplaceDimensions(cube as table, dimensions as table) as table`

### Cube.Transform

Applies the list cube functions, transforms, on the cube.

Syntax: `Cube.Transform(cube as table, transforms as list) as table`

### Culture.Current

Returns the current culture of the system.

### Currency.From

Returns a currency value from the given value.

Syntax: `Currency.From(value as any, optional culture as nullable text, optional roundingMode as nullable)`

Example: `Currency.From("1.23455")`

Answer: 1.2346

Example: `Currency.From("1.23455", "en-US", RoundingMode.Down)`

Answer: 1.2345

### DataLake.Contents

### DataLake.Files

### Date.AddDays

Returns a Date/DateTime/DateTimeZone value with the day portion incremented by the number of days provided. It also handles incrementing the month and year portions of the value as appropriate.

Syntax: `Date.AddDays(dateTime as any, numberOfDays as number) as any`

Example: `Date.AddDays(#date(2011, 5, 14), 5)`

### Date.AddMonths

Returns a DateTime value with the month portion incremented by n months.

Syntax: `Date.AddMonths(dateTime as any, numberOfMonths as number) as any`

Example: `Date.AddMonths(#datetime(2011, 5, 14, 8, 15, 22), 18)`

### Date.AddQuarters

Returns a Date/DateTime/DateTimeZone value incremented by the number of quarters provided. Each quarter is defined as a duration of three months. It also handles incrementing the year portion of the value as appropriate.

Syntax: `Date.AddQuarters(dateTime as any, numberOfQuarters as number) as any`

Example: `Date.AddQuarters(#date(2011, 5, 14), 1)`

### Date.AddWeeks

Returns a Date/DateTime/DateTimeZone value incremented by the number of weeks provided. Each week is defined as a duration of seven days. It also handles incrementing the month and year portions of the value as appropriate.

Syntax: `Date.AddWeeks(dateTime as any, numberOfWeeks as number) as any`

Example: `Date.AddWeeks(#date(2011, 5, 14), 2)`

### Date.AddYears

Returns a DateTime value with the year portion incremented by n years.

Syntax: `Date.AddYears(dateTime as any, numberOfYears as number) as any`

Example: `Date.AddYears(#datetime(2011, 5, 14, 8, 15, 22), 10)`

### Date.Day

Returns the day for a DateTime value.

Syntax: `Date.Day(dateTime as any) as nullable number`

Example: `Date.Day(#datetime(2011, 5, 14, 17, 0, 0))`

Answer: 14

### Date.DayOfWeek

Returns a number (from 0 to 6) indicating the day of the week of the provided value.

Syntax: `Date.DayOfWeek(dateTime as any, optional firstDayOfWeek as nullable number [varies according to culture]) as nullable number`

Example: `Date.DayOfWeek(#date(2011, 02, 21), Day.Monday)`

Answer: 0 Monday

### Date.DayOfWeekName

Returns the day of the week name.

Syntax: `Date.DayOfWeekName(date as any, optional culture as nullable text)`

Example: `Date.DayOfWeekName(#date(2011, 12, 31), "en-US")`

### Date.DayOfYear

Returns a number that represents the day of the year from a DateTime value.

Syntax: `Date.DayOfYear(dateTime as any) as nullable number`

Example: `Date.DayOfYear(#date(2011, 03, 01))`

Answer: 60

### Date.DaysInMonth

Returns the number of days in the month from a DateTime value.

Syntax: `Date.DaysInMonth(dateTime as any) as nullable number`

Example: `Date.DaysInMonth(#date(2011, 12, 01))`

Answer: 31

### Date.EndOfDay

Returns a DateTime value for the end of the day.

Example: `Date.EndOfDay(#datetime(2011, 5, 14, 17, 0, 0))`

Answer: `#datetime(2011, 5, 14, 23, 59, 59.9999999)`

Example: `Date.EndOfDay(#datetimezone(2011, 5, 17, 5, 0, 0, -7, 0))`

Answer: `#datetimezone(2011, 5, 17, 23, 59, 59.9999999, -7, 0)`

### Date.EndOfMonth

Returns a DateTime value for the end of the month.

Syntax: `Date.EndOfMonth(dateTime as any) as any`

Example: `Date.EndOfMonth(#date(2011, 5, 14))`

### Date.EndOfQuarter

Returns a Date/DateTime/DateTimeZone value representing the end of the quarter. The date and time portions are reset to their terminating values for the quarter. The timezone information is persisted.

Syntax: `Date.EndOfQuarter(dateTime as any) as any`

Example: `Date.EndOfQuarter(#datetime(2011, 10, 10, 8, 0, 0))`

## Date.EndOfWeek

Returns a DateTime value for the end of the week.

Syntax: Date.EndOfWeek(dateTime as any, optional firstDayOfWeek as nullable number [Day.Sunday]) as any

Example: Date.EndOfWeek(#date(2011, 5, 14))

Answer: #date(2011, 5, 14)

Example: Date.EndOfWeek(#datetimezone(2011, 5, 17, 5, 0, 0, -7, 0), Day.Sunday)

Answer: #datetimezone(2011, 5, 21, 23, 59, 59.9999999, -7, 0)

## Date.EndOfYear

Returns a DateTime value for the end of the year.

Syntax: Date.EndOfYear(dateTime as any) as any

Example: Date.EndOfYear(#datetime(2011, 5, 14, 17, 0, 0))

Answer: #datetime(2011, 12, 31, 23, 59, 59.9999999)

## Date.From

Returns a date value from a value.

Syntax: Date.From(value as any, optional culture as nullable text) as nullable date

Example: Date.From(43910)

Answer: #date(2020, 3, 20)

Example: Date.From(#datetime(1899, 12, 30, 06, 45, 12))

Answer: #date(1899, 12, 30)

## Date.FromText

Returns a Date value from a set of date formats and culture value.

Syntax: Date.FromText(text as nullable text, optional culture as nullable text) as nullable date

Example: Date.FromText("2010-12-31")

Example: Date.FromText("2010, 12, 31")

Example: Date.FromText("2010, 12")

Example: Date.FromText("2010")

## Date.IsInCurrentDay

Indicates whether the given datetime value dateTime occurs during the current day, as determined by the current date and time on the system.

Syntax: Date.IsInCurrentDay(dateTime as any) as nullable logical

Example: Date.IsInCurrentDay(DateTime.FixedLocalNow())

## Date.IsInCurrentMonth

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the current month, as determined by the current date and time on the system.

Syntax: Date.IsInCurrentMonth(dateTime as any) as nullable logical

Example: Date.IsInCurrentMonth(DateTime.FixedLocalNow())

## Date.IsInCurrentQuarter

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the current quarter, as determined by the current date and time on the system.

Syntax: Date.IsInCurrentQuarter(dateTime as any) as nullable logical

Example: Date.IsInCurrentQuarter(DateTime.FixedLocalNow())

### Date.IsInCurrentWeek

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the current week, as determined by the current date and time on the system.

Syntax: `Date.IsInCurrentWeek(dateTime as any) as nullable logical`

Example: `Date.IsInCurrentWeek(DateTime.FixedLocalNow())`

### Date.IsInCurrentYear

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the current year, as determined by the current date and time on the system.

Syntax: `Date.IsInCurrentYear(dateTime as any) as nullable logical`

Example: `Date.IsInCurrentYear(DateTime.FixedLocalNow())`

### Date.IsInNextDay

Indicates whether the given datetime value dateTime occurs during the next day, as determined by the current date and time on the system.

Syntax: `Date.IsInNextDay(dateTime as any) as nullable logical`

Example: `Date.IsInNextDay(Date.AddDays(DateTime.FixedLocalNow(), 1))`

### Date.IsInNextMonth

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the next month, as determined by the current date and time on the system.

Syntax: `Date.IsInNextMonth(dateTime as any) as nullable logical`

Example: `Date.IsInNextMonth(Date.AddMonths(DateTime.FixedLocalNow(), 1))`

### Date.IsInNextNDays

Indicates whether the given datetime value dateTime occurs during the next number of days, as determined by the current date and time on the system.

Syntax: `Date.IsInNextNDays(dateTime as any, days as number) as nullable logical`

Example: `Date.IsInNextNDays(Date.AddDays(DateTime.FixedLocalNow(), 1), 2)`

### Date.IsInNextNMonths

Indicates whether the given datetime value dateTime occurs during the next number of months, as determined by the current date and time on the system.

Syntax: `Date.IsInNextNMonths(dateTime as any, months as number) as nullable logical`

Example: `Date.IsInNextNMonths(Date.AddMonths(DateTime.FixedLocalNow(), 1), 2)`

### Date.IsInNextNQuarters

Indicates whether the given datetime value dateTime occurs during the next number of quarters, as determined by the current date and time on the system.

Syntax: `Date.IsInNextNQuarters(dateTime as any, quarters as number) as nullable logical`

Example: `Date.IsInNextNQuarters(Date.AddQuarters(DateTime.FixedLocalNow(), 1), 2)`

### Date.IsInNextNWeeks

Indicates whether the given datetime value dateTime occurs during the next number of weeks, as determined by the current date and time on the system.

Syntax: `Date.IsInNextNWeeks(dateTime as any, weeks as number) as nullable logical`

Example: `Date.IsInNextNWeeks(Date.AddDays(DateTime.FixedLocalNow(), 7), 2)`

### Date.IsInNextNYears

Indicates whether the given datetime value dateTime occurs during the next number of years, as determined by the current date and time on the system.

Syntax: `Date.IsInNextNYears(dateTime as any, years as number) as nullable logical`

Example: `Date.IsInNextNYears(Date.AddYears(DateTime.FixedLocalNow(), 1), 2)`

### `Date.IsInNextQuarter`

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the next quarter, as determined by the current date and time on the system.

Syntax: `Date.IsInNextQuarter(dateTime as any) as nullable logical`

Example: `Date.IsInNextQuarter(Date.AddQuarters(DateTime.FixedLocalNow(), 1))`

### `Date.IsInNextWeek`

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the next week, as determined by the current date and time on the system.

Syntax: `Date.IsInNextWeek(dateTime as any) as nullable logical`

Example: `Date.IsInNextWeek(Date.AddDays(DateTime.FixedLocalNow(), 7))`

### `Date.IsInNextYear`

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the next year, as determined by the current date and time on the system.

Syntax: `Date.IsInNextYear(dateTime as any) as nullable logical`

Example: `Date.IsInNextYear(Date.AddYears(DateTime.FixedLocalNow(), 1))`

### `Date.IsInPreviousDay`

Indicates whether the given datetime value dateTime occurs during the previous day, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousDay(dateTime as any) as nullable logical`

Example: `Date.IsInPreviousDay(Date.AddDays(DateTime.FixedLocalNow(), -1))`

### `Date.IsInPreviousMonth`

Returns a logical value indicating whether the given Date/DateTime/DateTimeZone occurred during the previous month, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousMonth(dateTime as any) as nullable logical`

Example: `Date.IsInPreviousMonth(Date.AddMonths(DateTime.FixedLocalNow(), -1))`

### `Date.IsInPreviousNDays`

Indicates whether the given datetime value dateTime occurs during the previous number of days, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousNDays(dateTime as any, days as number) as nullable logical`

Example: `Date.IsInPreviousNDays(Date.AddDays(DateTime.FixedLocalNow(), -1), 2)`

### `Date.IsInPreviousNMonths`

Indicates whether the given datetime value dateTime occurs during the previous number of months, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousNMonths(dateTime as any, months as number) as nullable logical`

Example: `Date.IsInPreviousNMonths(Date.AddMonths(DateTime.FixedLocalNow(), -1), 2)`

### `Date.IsInPreviousNQuarters`

Indicates whether the given datetime value dateTime occurs during the previous number of quarters, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousNQuarters(dateTime as any, quarters as number) as nullable logical`

Example: `Date.IsInPreviousNQuarters(Date.AddQuarters(DateTime.FixedLocalNow(), -1), 2)`

### Date.IsInPreviousNWeeks

Indicates whether the given datetime value `dateTime` occurs during the previous number of weeks, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousNWeeks(dateTime as any, weeks as number)` as nullable logical

Example: `Date.IsInPreviousNWeeks(Date.AddDays(DateTime.FixedLocalNow(), -7), 2)`

### Date.IsInPreviousNYears

Indicates whether the given datetime value `dateTime` occurs during the previous number of years, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousNYears(dateTime as any, years as number)` as nullable logical

Example: `Date.IsInPreviousNYears(Date.AddYears(DateTime.FixedLocalNow(), -1), 2)`

### Date.IsInPreviousQuarter

Returns a logical value indicating whether the given `Date/DateTime/DateTimeZone` occurred during the previous quarter, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousQuarter(dateTime as any)` as nullable logical

Example: `Date.IsInPreviousQuarter(Date.AddQuarters(DateTime.FixedLocalNow(), -1))`

### Date.IsInPreviousWeek

Returns a logical value indicating whether the given `Date/DateTime/DateTimeZone` occurred during the previous week, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousWeek(dateTime as any)` as nullable logical

Example: `Date.IsInPreviousWeek(Date.AddDays(DateTime.FixedLocalNow(), -7))`

### Date.IsInPreviousYear

Returns a logical value indicating whether the given `Date/DateTime/DateTimeZone` occurred during the previous year, as determined by the current date and time on the system.

Syntax: `Date.IsInPreviousYear(dateTime as any)` as nullable logical

Example: `Date.IsInPreviousYear(Date.AddYears(DateTime.FixedLocalNow(), -1))`

### Date.IsInYearToDate

Returns a logical value indicating whether the given `Date/DateTime/DateTimeZone` occurred in the period starting January 1st of the current year and ending on the current day, as determined by the current date and time on the system.

Syntax: `Date.IsInYearToDate(dateTime as any)` as nullable logical

Example: `Date.IsInYearToDate(DateTime.FixedLocalNow())`

### Date.IsLeapYear

Returns a logical value indicating whether the year portion of a `DateTime` value is a leap year.

Syntax: `Date.IsLeapYear(dateTime as any)` as nullable logical

Example: `Date.IsLeapYear(#date(2012, 01, 01))`

### Date.Month

Excel equivalent: MONTH

Returns the month from a `DateTime` value.

Syntax: `Date.Month(dateTime as any)` as nullable number

Example: `Date.Month(#datetime(2011, 12, 31, 9, 15, 36))`

### Date.MonthName

Excel equivalent: TEXT

Returns the name of the month component.

Syntax: Date.MonthName(date as any, optional culture as nullable text) as nullable text

Example: Date.MonthName(#datetime(2011, 12, 31, 5, 0, 0), "en-US")

### Date.QuarterOfYear

Returns a number between 1 and 4 for the quarter of the year from a DateTime value.

Syntax: Date.QuarterOfYear(dateTime as any) as nullable number

Example: Date.QuarterOfYear(#date(2011, 12, 31))

### Date.StartOfDay

Excel equivalent: INT

Returns a DateTime value for the start of the day.

Syntax: Date.StartOfDay(dateTime as any) as any

Example: Date.StartOfDay(#datetime(2011, 10, 10, 8, 0, 0))

### Date.StartOfMonth

Excel equivalent: DATE

Returns a DateTime value representing the start of the month.

Syntax: Date.StartOfMonth(dateTime as any) as any

Example: Date.StartOfMonth(#datetime(2011, 10, 10, 8, 10, 32))

### Date.StartOfQuarter

Excel equivalent: DATE

Returns a DateTime value representing the start of the quarter.

Syntax: Date.StartOfQuarter(dateTime as any) as any

Example: Date.StartOfQuarter(#datetime(2011, 10, 10, 8, 0, 0))

### Date.StartOfWeek

Excel equivalent: WEEKDAY

Returns a DateTime value representing the start of the week.

Syntax: Date.StartOfWeek(dateTime as any, optional firstDayOfWeek as nullable number) as any

Example: Date.StartOfWeek(#datetime(2011, 10, 10, 8, 10, 32))

### Date.StartOfYear

Returns a DateTime value representing the start of the year.

Syntax: Date.StartOfYear(dateTime as any) as any

Example: Date.StartOfYear(#datetime(2011, 10, 10, 8, 10, 32))

### Date.ToRecord

Returns a record containing parts of a Date value.

Syntax: Date.ToRecord(date as date) as record

Example: Date.ToRecord(#date(2011, 12, 31))

### Date.ToText

Returns a text value from a Date value.

Syntax: Date.ToText(date as nullable date, optional format as nullable text, optional culture as nullable text) as nullable text

Example: Date.ToText(#date(2010, 12, 31))

Example: Date.ToText(#date(2010, 12, 31), "yyyy/MM/dd")

### Date.WeekOfMonth

Returns a number for the count of week in the current month.



Syntax: Date.WeekOfMonth(dateTime as any, optional firstDayOfWeek as nullable number) as nullable number

Example: Date.WeekOfMonth(#date(2011, 03, 15))

### Date.WeekOfYear

Excel equivalent: WEEKNUM

Returns a number for the count of week in the current year.

Syntax: Date.WeekOfYear(dateTime as any, optional firstDayOfWeek as nullable number) as nullable number

Example: Date.WeekOfYear(#date(2011, 03, 27))

### Date.Year

Excel equivalent: YEAR

Returns the year from a DateTime value.

Syntax: Date.Year(dateTime as any) as nullable number

Example: Date.Year(#datetime(2011, 12, 31, 9, 15, 36))

### DateTime.AddZone

Adds the timezonehours as an offset to the input datetime value and returns a new datetimezone value.

Syntax: DateTime.AddZone(dateTime as nullable datetime, timezoneHours as number, optional timezoneMinutes as nullable number) as nullable datetimezone

Example: DateTime.AddZone(#datetime(2010, 12, 31, 11, 56, 02), 7, 30)

Answer: #datetimezone(2010, 12, 31, 11, 56, 2, 7, 30)

### DateTime.Date

Returns a date part from a DateTime value

Syntax: DateTime.Date(dateTime as any) as nullable date

Example: DateTime.Date(#datetime(2010, 12, 31, 11, 56, 02))

Answer: #date(2010, 12, 31)

### DateTime.FixedLocalNow

Returns a DateTime value set to the current date and time on the system.

Syntax: DateTime.FixedLocalNow() as datetime

### DateTime.From

Returns a datetime value from a value.

Syntax: DateTime.From(value as any, optional culture as nullable text) as nullable datetime

Example: DateTime.From(#time(06, 45, 12))

Answer: #datetime(1899, 12, 30, 06, 45, 12)

Example: DateTime.From(#date(1975, 4, 4))

Answer: #datetime(1975, 4, 4, 0, 0, 0)

### DateTime.FromFileTime

Returns a DateTime value from the supplied number.

Syntax: DateTime.FromFileTime(fileTime as nullable number) as nullable datetime

Example: DateTime.FromFileTime(129876402529842245)

Answer: #datetime(2012, 7, 24, 14, 50, 52.9842245)

### DateTime.FromText

Returns a DateTime value from a set of date formats and culture value.

Syntax: `DateTime.FromText(text as nullable text, optional culture as nullable text) as nullable datetime`

Example: `DateTime.FromText("2010-12-31T01:30:25")`

Answer: `#datetime(2010, 12, 31, 1, 30, 25)`

Example: `DateTime.FromText("2010-12-31T01:30")`

Answer: `#datetime(2010, 12, 31, 1, 30, 0)`

Example: `DateTime.FromText("20101231T013025")`

Answer: `#datetime(2010, 12, 31, 1, 30, 25)`

Example: `DateTime.FromText("20101231T01:30:25")`

Answer: `#datetime(2010, 12, 31, 1, 30, 25)`

Example: `DateTime.FromText("20101231T01:30:25.121212")`

Answer: `#datetime(2010, 12, 31, 1, 30, 25.121212)`

### `DateTime.IsInCurrentHour`

Indicates whether the given datetime value occurs during the current hour, as determined by the current date and time on the system.

Syntax: `DateTime.IsInCurrentHour(dateTime as any) as nullable logical`

Example: `DateTime.IsInCurrentHour(DateTime.FixedLocalNow())`

### `DateTime.IsInCurrentMinute`

Indicates whether the given datetime value occurs during the current minute, as determined by the current date and time on the system.

Syntax: `DateTime.IsInCurrentMinute(dateTime as any) as nullable logical`

Example: `DateTime.IsInCurrentMinute(DateTime.FixedLocalNow())`

### `DateTime.IsInCurrentSecond`

Indicates whether the given datetime value occurs during the current second, as determined by the current date and time on the system.

Syntax: `DateTime.IsInCurrentSecond(dateTime as any) as nullable logical`

Example: `DateTime.IsInCurrentSecond(DateTime.FixedLocalNow())`

### `DateTime.IsInNextHour`

Indicates whether the given datetime value occurs during the next hour, as determined by the current date and time on the system.

Syntax: `DateTime.IsInNextHour(dateTime as any) as nullable logical`

Example: `DateTime.IsInNextHour(DateTime.FixedLocalNow() + #duration(0,1,0,0))`

### `DateTime.IsInNextMinute`

Indicates whether the given datetime value occurs during the next minute, as determined by the current date and time on the system.

Syntax: `DateTime.IsInNextMinute(dateTime as any) as nullable logical`

Example: `DateTime.IsInNextMinute(DateTime.FixedLocalNow() + #duration(0,0,1,0))`

### `DateTime.IsInNextNHours`

Indicates whether the given datetime value occurs during the next number of hours, as determined by the current date and time on the system.

Syntax: `DateTime.IsInNextNHours(dateTime as any, hours as number) as nullable logical`

Example: `DateTime.IsInNextNHours(DateTime.FixedLocalNow() + #duration(0,2,0,0), 2)`

### DateTime.IsInNextNMinutes

Indicates whether the given datetime value occurs during the next number of minutes, as determined by the current date and time on the system.

Syntax: `DateTime.IsInNextNMinutes(dateTime as any, minutes as number) as nullable logical`

Example: `DateTime.IsInNextNMinutes(DateTime.FixedLocalNow() + #duration(0,0,2,0), 2)`

### DateTime.IsInNextNSeconds

Indicates whether the given datetime value occurs during the next number of seconds, as determined by the current date and time on the system.

Syntax: `DateTime.IsInNextNSeconds(dateTime as any, seconds as number) as nullable logical`

Example: `DateTime.IsInNextNSeconds(DateTime.FixedLocalNow() + #duration(0,0,0,2), 2)`

### DateTime.IsInNextSecond

Indicates whether the given datetime value occurs during the next second, as determined by the current date and time on the system.

Syntax: `DateTime.IsInNextSecond(dateTime as any) as nullable logical`

Example: `DateTime.IsInNextSecond(DateTime.FixedLocalNow() + #duration(0,0,0,1))`

### DateTime.IsInPreviousHour

Indicates whether the given datetime value occurs during the previous hour, as determined by the current date and time on the system.

Syntax: `DateTime.IsInPreviousHour(dateTime as any) as nullable logical`

Example: `DateTime.IsInPreviousHour(DateTime.FixedLocalNow() - #duration(0,1,0,0))`

### DateTime.IsInPreviousMinute

Indicates whether the given datetime value occurs during the previous minute, as determined by the current date and time on the system.

Syntax: `DateTime.IsInPreviousMinute(dateTime as any) as nullable logical`

Example: `DateTime.IsInPreviousMinute(DateTime.FixedLocalNow() - #duration(0,0,1,0))`

### DateTime.IsInPreviousNHours

Indicates whether the given datetime value occurs during the previous number of hours, as determined by the current date and time on the system.

Syntax: `DateTime.IsInPreviousNHours(dateTime as any, hours as number) as nullable logical`

Example: `DateTime.IsInPreviousNHours(DateTime.FixedLocalNow() - #duration(0,2,0,0), 2)`

### DateTime.IsInPreviousNMinutes

Indicates whether the given datetime value occurs during the previous number of minutes, as determined by the current date and time on the system.

Syntax: `DateTime.IsInPreviousNMinutes(dateTime as any, minutes as number) as nullable logical`

Example: `DateTime.IsInPreviousNMinutes(DateTime.FixedLocalNow() - #duration(0,0,2,0), 2)`

### DateTime.IsInPreviousNSeconds

Indicates whether the given datetime value occurs during the previous number of seconds, as determined by the current date and time on the system.

Syntax: `DateTime.IsInPreviousNSeconds(dateTime as any, seconds as number) as nullable logical`

Example: `DateTime.IsInPreviousNSeconds(DateTime.FixedLocalNow() - #duration(0,0,0,2), 2)`

### DateTime.IsInPreviousSecond

Indicates whether the given datetime value occurs during the previous second, as determined by the current date and time on the system.

Syntax: `DateTime.IsInPreviousSecond(dateTime as any)` as nullable logical

Example: `DateTime.IsInPreviousSecond(DateTime.FixedLocalNow() - #duration(0,0,0,1))`

### `DateTime.LocalNow`

Returns a datetime value set to the current date and time on the system.

Syntax: `DateTime.LocalNow()` as datetime

### `DateTime.Time`

Returns a time part from a DateTime value.

Syntax: `DateTime.Time(dateTime as any)` as nullable time

Example: `DateTime.Time(#datetime(2010, 12, 31, 11, 56, 02))`

Answer: `#time(11, 56, 2)`

### `DateTime.ToRecord`

Returns a record containing parts of a DateTime value.

Syntax: `DateTime.ToRecord(dateTime as datetime)` as record

Example: `DateTime.ToRecord(#datetime(2011, 12, 31, 11, 56, 2))`

### `DateTime.ToText`

Returns a text value from a DateTime value.

Syntax: `DateTime.ToText(dateTime as nullable datetime, optional format as nullable text, optional culture as nullable text)` as nullable text

Example: `DateTime.ToText(#datetime(2010, 12, 31, 11, 56, 2))`

Answer: `"12/31/2010 11:56:02 AM"`

Example: `DateTime.ToText(#datetime(2010, 12, 31, 11, 56, 2), "yyyy/MM/ddThh:mm:ss")`

Answer: `"2010/12/31T11:56:02"`

### `DateTimeZone.FixedLocalNow`

Returns a DateTimeZone value set to the current date, time, and timezone offset on the system.

Syntax: `DateTimeZone.FixedLocalNow()` as datetimezone

### `DateTimeZone.FixedUtcNow`

Returns the current date and time in UTC (the GMT timezone).

Syntax: `DateTimeZone.FixedUtcNow()` as datetimezone

### `DateTimeZone.From`

Returns a datetimezone value from a value.

Syntax: `DateTimeZone.From(value as any, optional culture as nullable text)` as nullable datetimezone

Example: `DateTimeZone.From("2020-10-30T01:30:00-08:00")`

Answer: `#datetimezone(2020, 10, 30, 01, 30, 00, -8, 00)`

### `DateTimeZone.FromFileTime`

Returns a DateTimeZone from a number value.

Syntax: `DateTimeZone.FromFileTime(fileTime as nullable number)` as nullable datetimezone

Example: `DateTimeZone.FromFileTime(129876402529842245)`

Answer: `#datetimezone(2012, 7, 24, 14, 50, 52.9842245, -7, 0)`

### `DateTimeZone.FromText`

Returns a DateTimeZone value from a set of date formats and culture value.

Syntax: `DateTimeZone.FromText(text as nullable text, optional culture as nullable text)` as nullable datetimezone

Example: `DateTimeZone.FromText("2010-12-31T01:30:00-08:00")`

Answer: `#datetimezone(2010, 12, 31, 1, 30, 0, -8, 0)`

Example: `DateTimeZone.FromText("2010-12-31T01:30:00.121212-08:00")`

Answer: `#datetimezone(2010, 12, 31, 1, 30, 0.121212, -8, 0)`

Example: `DateTimeZone.FromText("2010-12-31T01:30:00Z")`

Answer: `#datetimezone(2010, 12, 31, 1, 30, 0, 0, 0)`

Example: `DateTimeZone.FromText("20101231T013000+0800")`

Answer: `#datetimezone(2010, 12, 31, 1, 30, 0, 8, 0)`

## `DateTimeZone.LocalNow`

Returns a `DateTime` value set to the current system date and time.

Syntax: `DateTimeZone.LocalNow()` as `datetimezone`

## `DateTimeZone.RemoveZone`

Returns a `datetime` value with the zone information removed from the input `datetimezone` value.

Syntax: `DateTimeZone.RemoveZone(datetimezone as nullable datetimezone) as nullable datetime`

Example: `DateTimeZone.RemoveZone(#datetimezone(2011, 12, 31, 9, 15, 36, -7, 0))`

Answer: `#datetime(2011, 12, 31, 9, 15, 36)`

## `DateTimeZone.SwitchZone`

Changes the timezone information for the input `DateTimeZone`.

Syntax: `DateTimeZone.SwitchZone(datetimezone as nullable datetimezone, timezoneHours as number, optional timezoneMinutes as nullable number) as nullable datetimezone`

Example: `DateTimeZone.SwitchZone(#datetimezone(2010, 12, 31, 11, 56, 02, 7, 30), 8)`

Answer: `#datetimezone(2010, 12, 31, 12, 26, 2, 8, 0)`

Example: `DateTimeZone.SwitchZone(#datetimezone(2010, 12, 31, 11, 56, 02, 7, 30), 0, -30)`

Answer: `#datetimezone(2010, 12, 31, 3, 56, 2, 0, -30)`

## `DateTimeZone.ToLocal`

Returns a `DateTime` value from the local time zone.

Syntax: `DateTimeZone.ToLocal(datetimezone as nullable datetimezone) as nullable datetimezone`

Example: `DateTimeZone.ToLocal(#datetimezone(2010, 12, 31, 11, 56, 02, 7, 30))`

Answer: `#datetimezone(2010, 12, 31, 12, 26, 2, -8, 0)`

## `DateTimeZone.ToRecord`

Returns a record containing parts of a `DateTime` value.

Syntax: `DateTimeZone.ToRecord(datetimezone as datetimezone) as record`

Example: `DateTimeZone.ToRecord(#datetimezone(2011, 12, 31, 11, 56, 2, 8, 0))`

## `DateTimeZone.ToText`

Returns a text value from a `DateTime` value.

Syntax: `DateTimeZone.ToText(datetimezone as nullable datetimezone, optional format as nullable text, optional culture as nullable text) as nullable text`

Example: `DateTimeZone.ToText(#datetimezone(2010, 12, 31, 11, 56, 2, 8, 0))`

Answer: `"12/31/2010 11:56:02 AM +08:00"`

Example: `DateTimeZone.ToText(#datetimezone(2010, 12, 31, 11, 56, 2, 10, 12), "yyyy/MM/ddThh:mm:sszzz")`

Answer: `"2010/12/31T11:56:02+10:12"`

## `DateTimeZone.ToUtc`

Returns a `DateTime` value to the Utc time zone.

Syntax: `DateTimeZone.ToUtc(dateTimeZone as nullable datetimezone) as nullable datetimezone`

Example: `DateTimeZone.ToUtc(#datetimezone(2010, 12, 31, 11, 56, 02, 7, 30))`

Answer: `#datetimezone(2010, 12, 31, 4, 26, 2, 0, 0)`

`DateTimeZone.UtcNow`

Returns a `DateTime` value set to the current system date and time in the `Utc` timezone.

Syntax: `DateTimeZone.UtcNow()` as `datetimezone`

Example: `DateTimeZone.UtcNow()`

`DateTimeZone.ZoneHours`

Returns a time zone hour value from a `DateTime` value.

Syntax: `DateTimeZone.ZoneHours(dateTimeZone as nullable datetimezone) as nullable number`

`DateTimeZone.ZoneMinutes`

Returns a time zone minute value from a `DateTime` value.

Syntax: `DateTimeZone.ZoneMinutes(dateTimeZone as nullable datetimezone) as nullable number`

`Day.Friday`

Represents Friday.

Value: 5

`Day.Monday`

Represents Monday.

Value: 1

`Day.Saturday`

Represents Saturday.

Value: 6

`Day.Sunday`

Represents Sunday.

Value: 0

`Day.Thursday`

Represents Thursday.

Value: 4

`Day.Tuesday`

Represents Tuesday.

Value: 2

`Day.Wednesday`

Represents Wednesday.

Value: 3

`DB2.Database`

Returns a table of SQL tables and views available in a Db2 database.

Syntax: `DB2.Database(server as text, database as text, optional options as nullable record) as table`

`Decimal.From`

Returns a decimal number value from the given value.

Syntax: `Decimal.From(value as any, optional culture as nullable text)` as nullable number

Example: `Decimal.From("4.5")`

Answer: 4.5

`Diagnostics.ActivityId`

Returns an opaque identifier for the currently-running evaluation.

Syntax: `Diagnostics.ActivityId()` as nullable text

`Diagnostics.Trace`

Writes a trace message, if tracing is enabled, and returns value.

Syntax: `Diagnostics.Trace(traceLevel as number, message as anyonnull, value as any, optional delayed as`

Example: `Diagnostics.Trace(TraceLevel.Information, "TextValueFromNumber", () => Text.From(123), true)`

`DirectQueryCapabilities.From`

`DirectQueryCapabilities.From`

Syntax: `DirectQueryCapabilities.From(value as any)` as table

`Double.From`

Returns a Double number value from the given value.

Syntax: `Double.From(value as any, optional culture as nullable text)` as nullable number

Example: `Double.From("4.5")`

Answer: 4.5

`Duration.Days`

Returns the day component of a Duration value.

Syntax: `Duration.Days(duration as nullable duration)` as nullable number

Example: `Duration.Days(#duration(5, 4, 3, 2))`

Answer: 5

`Duration.From`

Returns a duration value from a value.

Syntax: `Duration.From(value as any)` as nullable duration

Example: `Duration.From(2.525)`

Answer: `#duration(2, 12, 36, 0)`

`Duration.FromText`

Returns a Duration value from a text value.

Syntax: `Duration.FromText(text as nullable text)` as nullable duration

Example: `Duration.FromText("2.05:55:20")`

Answer: `#duration(2, 5, 55, 20)`

`Duration.Hours`

Returns an hour component of a Duration value.

Syntax: `Duration.Hours(duration as nullable duration)` as nullable number

Example: `Duration.Hours(#duration(5, 4, 3, 2))`

`Duration.Minutes`

Returns a minute component of a Duration value.

Syntax: `Duration.Minutes(duration as nullable duration)` as nullable number

Example: `Duration.Minutes(#duration(5, 4, 3, 2))`

### Duration.Seconds

Returns a second component of a Duration value.

Syntax: `Duration.Seconds(duration as nullable duration) as nullable number`

Example: `Duration.Seconds(#duration(5, 4, 3, 2))`

### Duration.ToRecord

Returns a record with parts of a Duration value.

Syntax: `Duration.ToRecord(duration as duration) as record`

Example: `Duration.ToRecord(#duration(2, 5, 55, 20))`

### Duration.TotalDays

Returns the total magnitude of days from a Duration value.

Syntax: `Duration.TotalDays(duration as nullable duration) as nullable number`

Example: `Duration.TotalDays(#duration(5, 4, 3, 2))`

Answer: 5.1687731481481478

### Duration.TotalHours

Returns the total magnitude of hours from a Duration value.

Syntax: `Duration.TotalHours(duration as nullable duration) as nullable number`

Example: `Duration.TotalHours(#duration(5, 4, 3, 2))`

Answer: 124.05055555555555

### Duration.TotalMinutes

Returns the total magnitude of minutes from a Duration value.

Syntax: `Duration.TotalMinutes(duration as nullable duration) as nullable number`

Example: `Duration.TotalMinutes(#duration(5, 4, 3, 2))`

Answer: 7443.0333333333338

### Duration.TotalSeconds

Returns the total magnitude of seconds from a duration value.

Syntax: `Duration.TotalSeconds(duration as nullable duration) as nullable number`

Example: `Duration.TotalSeconds(#duration(5, 4, 3, 2))`

Answer: 446582

### Duration.ToText

Returns a text value from a Duration value.

Syntax: `Duration.ToText(duration as nullable duration, optional format as nullable text) as nullable text`

Example: `Duration.ToText(#duration(2, 5, 55, 20))`

Answer: "2.05:55:20"

### Embedded.Value

Accesses a value by name in an embedded mashup.

Syntax: `Embedded.Value(value as any, path as text) as any`

### Error.Record

Returns a record containing fields "Reason", "Message", and "Detail" set to the provided values. The record can be used to raise or throw an error.



Syntax: Error.Record(reason as text, optional message as nullable text, optional detail as any) as record

### Excel.CurrentWorkbook

Returns the tables in the current Excel Workbook.

Syntax: Excel.CurrentWorkbook() as table

### Excel.Workbook

Returns a table representing sheets in the given excel workbook.

Syntax: Excel.Workbook(workbook as binary, optional useHeaders as nullable logical, optional delayTypes as

### Exchange.Contents

Returns a table of contents from a Microsoft Exchange account.

Syntax: Exchange.Contents (optional mailboxAddress as nullable text) as table

### Expression.Constant

Returns the M source code representation of a constant value.

Syntax: Expression.Constant(value as any) as text

Example: Expression.Constant(123)

Example: Expression.Constant(#date(2035, 01, 02))

Answer: #date(2035, 1, 2)

Example: Expression.Constant("abc")

### Expression.Evaluate

Returns the result of evaluating an M expression.

Syntax: Expression.Evaluate(document as text, optional environment as nullable record) as any

Example: Expression.Evaluate("1 + 1")

Example: Expression.Evaluate("List.Sum({1, 2, 3})", [List.Sum = List.Sum])

Example: Expression.Evaluate(Expression.Constant("abc") & " & " & Expression.Identifier("x"), [x="def"])

### Expression.Identifier

Returns the M source code representation of an identifier.

Syntax: Expression.Identifier(name as text) as text

Example: Expression.Identifier("MyIdentifier")

Answer: MyIdentifier

Example: Expression.Identifier("My Identifier")

Answer: #"My Identifier"

### ExtraValues.Error

If the splitter function returns more columns than the table expects, an error should be raised.

Value: 1

### ExtraValues.Ignore

If the splitter function returns more columns than the table expects, they should be ignored.

Value: 2

### ExtraValues.List

If the splitter function returns more columns than the table expects, they should be collected into a list.

Value: 0

### Facebook.Graph

Returns a record containing content from the Facebook graph.

Syntax: Facebook.Graph(url as text) as any

### File.Contents

Returns the binary contents of the file located at a path.

Syntax: File.Contents(path as text) as binary

### Folder.Contents

Returns a table containing the properties and contents of the files and folders found at path.

Syntax: Folder.Contents(path as text) as table

### Folder.Files

Returns a table containing a row for each file found at a folder path, and subfolders. Each row contains properties of the folder or file and a link to its content.

Syntax: Folder.Files(path as text) as table

### Function.From

Takes a unary function function and creates a new function with the type functionType that constructs a list out of its arguments and passes it to function.

Syntax: Function.From(functionType as type, function as function) as function

Example: Function.From(type function (a as number, b as number) as number, List.Sum)(2, 1)

Example: Function.From(type function (a as text, b as text) as text, (list) => list{0} & list{1})("2", "1")

### Function.Invoke

Invokes the given function using the specified and returns the result.

Syntax: Function.Invoke(function as function, args as list) as any

Example: Function.Invoke(Record.FieldNames, {[A=1,B=2]})

### Function.InvokeAfter

Returns the result of invoking function after duration delay has passed.

Syntax: Function.InvokeAfter(function as function, delay as duration) as any

### Function.IsDataSource

Returns whether or not function is considered a data source.

Syntax: Function.IsDataSource(function as function) as logical

### Function.ScalarVector

Returns a scalar function of type scalarFunctionType that invokes vectorFunction with a single row of arguments and returns its single output.

Syntax: Function.ScalarVector(scalarFunctionType as type, vectorFunction as function) as function

### GroupKind.Global

GroupKind.Global

Value: 1

### GroupKind.Local

GroupKind.Local

Syntax: GroupKind.Local

Value: 0

## Guid.From

Returns a Guid.Type value from the given value.

Syntax: Guid.From(value as nullable text) as nullable text

Example: Guid.From("05FE1DADC8C24F3BA4C2D194116B4967")

Answer: 05fe1dad-c8c2-4f3b-a4c2-d194116b4967

Example: Guid.From("05FE1DAD-C8C2-4F3B-A4C2-D194116B4967")

Answer: 05fe1dad-c8c2-4f3b-a4c2-d194116b4967

Example: Guid.From("{05FE1DAD-C8C2-4F3B-A4C2-D194116B4967}")

Answer: 05fe1dad-c8c2-4f3b-a4c2-d194116b4967

Example: Guid.From("(05FE1DAD-C8C2-4F3B-A4C2-D194116B4967)")

Answer: 05fe1dad-c8c2-4f3b-a4c2-d194116b4967

## Hdfs.Contents

Returns a table containing a row for each folder and file found at the folder url, {0}, from a Hadoop file system. Each row contains properties of the folder or file and a link to its content.

Syntax: Hdfs.Contents(url as text) as table

## Hdfs.Files

Returns a table containing a row for each file found at the folder url, {0}, and subfolders from a Hadoop file system. Each row contains properties of the file and a link to its content.

Syntax: Hdfs.Files(url as text) as table

## HdInsight.Containers

Returns a navigational table containing all containers found in the HDInsight account. Each row has the container name and table containing its files.

Syntax: HdInsight.Containers(account as text) as table

## HdInsight.Contents

Returns a navigational table containing all containers found in the HDInsight account. Each row has the container name and table containing its files.

Syntax: HdInsight.Contents(account as text) as table

## HdInsight.Files

Returns a table containing a row for each folder and file found at the container URL, and subfolders from an HDInsight account. Each row contains properties of the file/folder and a link to its content.

Syntax: HdInsight.Files(account as text, containerName as text) as table

## Identity.From

Creates an identity.

Syntax: Identity.From(identityProvider as function, value as any) as record

## Identity.IsMemberOf

Determines whether an identity is a member of an identity collection.

Syntax: Identity.IsMemberOf(identity as record, collection as record) as logical

## IdentityProvider.Default

The default identity provider for the current host.

Syntax: IdentityProvider.Default() as any

## Informix.Database

Returns a table of SQL tables and views available in an Informix database on server server in the database instance named database.

Syntax: Informix.Database(server as text, database as text, optional options as nullable record) as table

## Int16.From

Returns a 16-bit integer number value from the given value.

Syntax: Int16.From(value as any, optional culture as nullable text, optional roundingMode as nullable

Example: Int16.From("4")

Answer: 4

Example: Int16.From("4.5", null, RoundingMode.AwayFromZero)

Answer: 5

## Int32.From

Returns a 32-bit integer number value from the given value.

Syntax: Int32.From(value as any, optional culture as nullable text, optional roundingMode as nullable

Example: Int32.From("4")

Answer: 4

Example: Int32.From("4.5", null, RoundingMode.AwayFromZero)

Answer: 5

## Int64.From

Returns a 64-bit integer number value from the given value.

Syntax: Int64.From(value as any, optional culture as nullable text, optional roundingMode as nullable

Example: Int64.From("4")

Answer: 4

Example: Int64.From("4.5", null, RoundingMode.AwayFromZero)

Answer: 5

## Int8.From

Returns a signed 8-bit integer number value from the given value.

Syntax: Int8.From(value as any, optional culture as nullable text, optional roundingMode as nullable

Example: Int8.From("4")

Answer: 4

Example: Int8.From("4.5", null, RoundingMode.AwayFromZero)

Answer: 5

## ItemExpression.From

Returns the AST for the body of a function.

Syntax: ItemExpression.From(function as function) as record

Example: ItemExpression.From(each \_ <> null)

Answer: KIND Binary

## ItemExpression.Item

An AST node representing the item in an item expression.

JoinAlgorithm.Dynamic

JoinAlgorithm.Dynamic

Value: 0

JoinAlgorithm.LeftHash

JoinAlgorithm.LeftHash

Value: 3

JoinAlgorithm.LeftIndex

JoinAlgorithm.LeftIndex

Value: 5

JoinAlgorithm.PairwiseHash

JoinAlgorithm.PairwiseHash

Value: 1

JoinAlgorithm.RightHash

JoinAlgorithm.RightHash

Value: 4

JoinAlgorithm.RightIndex

JoinAlgorithm.RightIndex

Value: 6

JoinAlgorithm.SortMerge

JoinAlgorithm.SortMerge

Value: 2

JoinKind.FullOuter

A possible value for the optional JoinKind parameter in Table.Join. A full outer join ensures that all rows of both tables appear in the result. Rows that did not have a match in the other table are joined with a default row containing null values for all of its columns.

Value: 3

JoinKind.Inner

A possible value for the optional JoinKind parameter in Table.Join. The table resulting from an inner join contains a row for each pair of rows from the specified tables that were determined to match based on the specified key columns.

Value: 0

JoinKind.LeftAnti

A possible value for the optional JoinKind parameter in Table.Join. A left anti join returns that all rows from the first table which do not have a match in the second table.

Value: 4

JoinKind.LeftOuter

A possible value for the optional JoinKind parameter in Table.Join. A left outer join ensures that all rows of the first table appear in the result.

Value: 1

### JoinKind.RightAnti

A possible value for the optional JoinKind parameter in Table.Join. A right anti join returns that all rows from the second table which do not have a match in the first table.

Value: 5

### JoinKind.RightOuter

A possible value for the optional JoinKind parameter in Table.Join. A right outer join ensures that all rows of the second table appear in the result.

Value: 2

### JoinSide.Left

Specifies the left table of a join.

Value: 0

### JoinSide.Right

Specifies the right table of a join.

Value: 1

### Json.Document

Returns the contents of a JSON document. The contents may be directly passed to the function as text, or it may be the binary value returned by a function like File.Contents.

Syntax: `Json.Document(jsonText as any, optional encoding as nullable number) as any`

### Json.FromValue

Produces a JSON representation of a given value.

Syntax: `Json.FromValue(value as any, optional encoding as nullable number) as binary`

Example: `Text.FromBinary(Json.FromValue([A={1, true, "3"}, B=#date(2012, 3, 25)]))`

Answer: `{"A":[1,true,"3"],"B":"2012-03-25"}`

### Kusto.Contents

### Kusto.Databases

### LimitClauseKind.AnsiSql2008

Value: 4

### LimitClauseKind.Limit

Value: 3

### LimitClauseKind.LimitOffset

Value: 2

### LimitClauseKind.None

Value: 0

### LimitClauseKind.Top

Value: 1

### Lines.FromBinary

Converts a binary value to a list of text values split at lines breaks.

Syntax: `Lines.FromBinary(binary as binary, optional quoteStyle as nullable number, optional`

### Lines.FromText

Converts a text value to a list of text values split at lines breaks.

Syntax: `Lines.FromText(text as text, optional quoteStyle as nullable number, optional`

### Lines.ToBinary

Converts a list of text into a binary value using the specified encoding and lineSeparator. The specified lineSeparator is appended to each line. If not specified then the carriage return and line feed characters are used.

Syntax: `Lines.ToBinary(lines as list, optional lineSeparator as nullable text, optional encoding as`

### Lines.ToText

Converts a list of text into a single text. The specified lineSeparator is appended to each line. If not specified then the carriage return and line feed characters are used.

Syntax: `Lines.ToText(lines as list, optional lineSeparator as nullable text) as text`

### List.Accumulate

Accumulates a result from the list. Starting from the initial value seed this function applies the accumulator function and returns the final result.

Syntax: `List.Accumulate(list as list, seed as any, accumulator as function) as any`

Example: `List.Accumulate({1, 2, 3, 4, 5}, 0, (state, current) => state + current)`

Answer: 15

### List.AllTrue

Excel equivalent: AND

Returns true if all expressions in a list are true

Syntax: `List.AllTrue(list as list) as logical`

Example: `List.AllTrue({true, true, 2 > 0})`

Answer: true

Example: `List.AllTrue({true, false, 2 < 0})`

Answer: false

### List.Alternate

Returns a list with the items alternated from the original list based on a count, optional repeatInterval, and an optional offset.

Syntax: `List.Alternate(list as list, count as number, optional repeatInterval as nullable number, optional offset as nullable number) as list`

Example: `List.Alternate({1..10}, 1)`

Answer: Create a list from {1..10} that skips the first number.

Example: `List.Alternate({1..10}, 1, 1)`

Answer: Create a list from {1..10} that skips the every other number.

Example: `List.Alternate({1..10}, 1, 1, 1)` - Create a list from {1..10} that starts at 1 and skips every other number.

Example: `List.Alternate({1..10}, 1, 2, 1)`

Answer: Create a list from {1..10} that starts at 1, skips one value, keeps two values and so on.

### List.AnyTrue

Excel equivalent: OR

Returns true if any expression in a list is true

Syntax: List.AnyTrue(list as list) as logical

Example: List.AnyTrue({true, false, 2>0})

Answer: true

Example: List.AnyTrue({2 = 0, false, 2 < 0})

Answer: false

## List.Average

Excel equivalent: AVERAGE

Returns an average value from a list in the datatype of the values in the list.

Syntax: List.Average(list as list, optional precision as nullable number) as any

Example: List.Average({3, 4, 6})

Answer: 4.33333333333333

Example: List.Average({#date(2011, 1, 1), #date(2011, 1, 2), #date(2011, 1, 3)})

Answer: #date(2011, 1, 2)

## List.Buffer

Buffers the list in memory. The result of this call is a stable list, which means it will have a deterministic count, and order of items.

Syntax: List.Buffer(list as list) as list

Example: List.Buffer({1..10})

## List.Combine

Merges a list of lists into single list.

Syntax: List.Combine(lists as list) as list

Example: List.Combine({{1, 2}, {3, 4}})

Example: List.Combine({{1, 2}, {3, {4, 5}}})

## List.Contains

Excel equivalent: OR

Returns true if a value is found in a list.

Syntax: List.Contains(list as list, value as any, optional equationCriteria as any) as logical

Example: List.Contains({1, 2, 3, 4, 5}, 3)

Answer: true

## List.ContainsAll

Excel equivalent: AND

Returns true if all items in values are found in a list.

Syntax: List.ContainsAll(list as list, values as list, optional equationCriteria as any) as logical

Example: List.ContainsAll({1, 2, 3, 4, 5}, {3, 4})

Answer: True

## List.ContainsAny

Excel equivalent: OR

Returns true if any item in values is found in a list.

Syntax: List.ContainsAny(list as list, values as list, optional equationCriteria as any) as logical

Example: List.ContainsAny({1, 2, 3, 4, 5}, {3, 9})

Answer: true

## List.Count

Excel equivalent: COUNT



Returns the number of items in a list.

Syntax: List.Count(list as list) as number

Example: List.Count({1, 2, 3})

Answer: 3

### List.Covariance

Returns the covariance from two lists as a number.

Syntax: List.Covariance(numberList1 as list, numberList2 as list) as nullable number

Example: List.Covariance({1, 2, 3},{1, 2, 3})

Answer: 0.6666666666667

### List.Dates

Returns a list of date values from size count, starting at start and adds an increment to every value.

Syntax: List.Dates(start as date, count as number, step as duration) as list

Example: List.Dates(#date(2011, 12, 31), 5, #duration(1, 0, 0, 0))

### List.DateTimeTimes

Returns a list of datetime values from size count, starting at start and adds an increment to every value.

Syntax: List.DateTimeTimes(start as datetime, count as number, step as duration) as list

Example: List.DateTimeTimes(#datetime(2011, 12, 31, 23, 55, 0), 10, #duration(0, 0, 1, 0))

### List.DateTimeZones

Returns a list of of datetimezone values from size count, starting at start and adds an increment to every value.

Syntax: List.DateTimeZones(start as datetimezone, count as number, step as duration) as list

Example: List.DateTimeZones(#datetimezone(2011, 12, 31, 23, 55, 0, -8, 0), 10, #duration(0, 0, 1, 0))

### List.Difference

Returns the items in list 1 that do not appear in list 2. Duplicate values are supported.

Syntax: List.Difference(list1 as list, list2 as list, optional equationCriteria as any) as list

Example: List.Difference({1, 2, 3, 4, 5},{4, 5, 3})

Answer: {1, 2}

Example: List.Difference({1, 2}, {1, 2, 3})

### List.Distinct

Filters a list down by removing duplicates. An optional equation criteria value can be specified to control equality comparison. The first value from each equality group is chosen.

Syntax: List.Distinct(list as list, optional equationCriteria as any) as list

Example: List.Distinct({1, 1, 2, 3, 3, 3})

### List.Durations

Returns a list of durations values from size count, starting at start and adds an increment to every value.

Syntax: List.Durations(start as duration, count as number, step as duration) as list

Example: List.Durations(#duration(0, 1, 0, 0), 5, #duration(0, 1, 0, 0))

### List.FindText

Searches a list of values, including record fields, for a text value.

Syntax: List.FindText(list as list, text as text) as list

Example: List.FindText({"a", "b", "ab"}, "a")

Answer: {"a", "ab"}

### List.First

Returns the first value of the list or the specified default if empty. Returns the first item in the list, or the optional default value, if the list is empty. If the list is empty and a default value is not specified, the function returns.

Syntax: List.First(list as list, optional defaultValue as any) as any

Example: List.First({1, 2, 3})

Answer: 1

Example: List.First({}, -1)

Answer: -1

### List.FirstN

Returns the first set of items in the list by specifying how many items to return or a qualifying condition provided by countOrCondition.

Syntax: List.FirstN(list as list, countOrCondition as any) as any

Example: List.FirstN({3, 4, 5, -1, 7, 8, 2}, each \_ > 0)

Answer: {3, 4, 5}

### List.Generate

Generates a list from a value function, a condition function, a next function, and an optional transformation function on the values.

Syntax: List.Generate(initial as function, condition as function, next as function, optional selector as nullable function) as list

Example: List.Generate(()=>10, each \_ > 0, each \_ - 1)

### List.InsertRange

Inserts items from values at the given index in the input list.

Syntax: List.InsertRange(list as list, index as number, values as list) as list

Example: List.InsertRange({1, 2, 5}, 2, {3, 4})

Answer: {1, 2, 3, 4, 5}

### List.Intersect

Returns a list from a list of lists and intersects common items in individual lists. Duplicate values are supported.

Syntax: List.Intersect(lists as list, optional equationCriteria as any) as list

Example: List.Intersect({{1..5}, {2..6}, {3..7}})

Answer: {3, 4, 5}

### List.IsDistinct

Returns whether a list is distinct.

Syntax: List.IsDistinct(list as list, optional equationCriteria as any) as logical

Example: List.IsDistinct({1, 2, 3})

### List.IsEmpty

Returns whether a list is empty.

Syntax: List.IsEmpty(list as list) as logical

Example: List.IsEmpty({})

### List.Last

Returns the last set of items in the list by specifying how many items to return or a qualifying condition provided by countOrCondition.

Syntax: List.Last(list as list, optional defaultValue as any) as any

Example: List.Last({1, 2, 3})

Answer: 3

Example: List.Last({}, -1)

Answer: -1

### List.LastN

Returns the last set of items in a list by specifying how many items to return or a qualifying condition.

Syntax: List.LastN(list as list, optional countOrCondition as any) as any

Example: List.LastN({3, 4, 5, -1, 7, 8, 2},1)

Answer: 2

Example: List.LastN({3, 4, 5, -1, 7, 8, 2}, each \_ > 0)

Answer: {7, 8, 2}

### List.MatchesAll

Excel equivalent: AND

Returns true if all items in a list meet a condition.

Syntax: List.MatchesAll(list as list, condition as function) as logical

Example: List.MatchesAll({11, 12, 13},each \_ > 10)

Answer: true

Example: List.MatchesAll({1, 2, 3},each \_ > 10)

Answer: false

### List.MatchesAny

Excel equivalent: OR

Returns true if any item in a list meets a condition.

Syntax: List.MatchesAny(list as list, condition as function) as logical

Example: List.MatchesAny({9, 10, 11},each \_ > 10)

Answer: true

Example: List.MatchesAny({1, 2, 3},each \_ > 10)

Answer: false

### List.Max

Excel equivalent: MAX

Returns the maximum item in a list, or the optional default value if the list is empty.

Syntax: List.Max(list as list, optional default as any, optional comparisonCriteria as any, optional includeNulls as nullable logical) as any

Example: List.Max({1, 4, 7, 3, -2, 5},1)

Answer: 7

Example: List.Max({}, -1)

Answer: -1

### List.MaxN

Excel equivalent: MAX

Returns the maximum values in the list. After the rows are sorted, optional parameters may be specified to further filter the result

Syntax: List.MaxN(list as list, countOrCondition as any, optional comparisonCriteria as any, optional includeNulls as nullable logical) as list

### List.Median

Excel equivalent: MEDIAN

Returns the median item from a list.

Syntax: List.Median(list as list, optional comparisonCriteria as any) as any

Example: powerquery-mList.Median({5, 3, 1, 7, 9})

Answer: 5

### List.Min

Excel equivalent: MIN

Returns the minimum item in a list, or the optional default value if the list is empty.

Syntax: List.Min(list as list, optional default as any, optional comparisonCriteria as any, optional includeNulls as nullable logical) as any

Example: List.Min({1, 4, 7, 3, -2, 5})

Answer: -2

Example: List.Min({}, -1)

Answer: -1

### List.MinN

Excel equivalent: MIN

Returns the minimum values in a list.

Syntax: List.MinN(list as list, countOrCondition as any, optional comparisonCriteria as any, optional includeNulls as nullable logical) as list

Example: List.MinN({3, 4, 5, -1, 7, 8, 2}, 5)

Answer: {-1, 2, 3, 4, 5}

### List.Mode

Excel equivalent: MODE

Returns an item that appears most commonly in a list.

Syntax: List.Mode(list as list, optional equationCriteria [what if there is more than one Mode] as any) as any

Example: List.Mode({"A", 1, 2, 3, 3, 4, 5})

Answer: 3

Example: List.Mode({"A", 1, 2, 3, 3, 4, 5, 5})

Answer: 5

### List.Modes

Excel equivalent: MODE

Returns all items that appear with the same maximum frequency.

Syntax: List.Modes(list as list, optional equationCriteria as any) as list

Example: List.Modes({"A", 1, 2, 3, 3, 4, 5, 5})

Answer: {3, 5}

### List.NonNullCount

Excel equivalent: COUNTA

Returns the number of items in a list excluding null values

Syntax: List.NonNullCount(list as list) as number

### List.Numbers

Returns a list of numbers from size count starting at initial, and adds an increment. The increment defaults to 1.

Syntax: List.Numbers(start as number, count as number, optional increment as nullable number) as list

Example: List.Numbers(1, 10)

Example: List.Numbers(1, 10, 2)

Answer: {1, 3, 5..., 19}

### List.PositionOf

Finds the first occurrence of a value in a list and returns its position.

Syntax: List.PositionOf(list as list, value as any, optional occurrence as nullable number, optional equationCriteria as any) as any

Example: List.PositionOf({1, 2, 3}, 3)

Answer: 2 [ 0-based]

Example: List.PositionOf({1, 2, 3}, 4)

Answer: -1

### List.PositionOfAny

Finds the first occurrence of any value in values and returns its position.

Syntax: List.PositionOfAny(list as list, values as list, optional occurrence as nullable number, optional equationCriteria as any) as any

Example: List.PositionOfAny({1, 2, 3}, {2, 3})

Answer: 1 [0-based]

### List.Positions

Returns a list of positions for an input list.

Syntax: List.Positions(list as list) as list

Example: List.Positions({1, 2, 3, 4, null, 5})

Answer: {0..5}

### List.Product

Excel equivalent: PRODUCT

Returns the product from a list of numbers.

Syntax: List.Product(numbersList as list, optional precision as nullable number) as nullable number

Example: List.Product({1, 2, 3, 3, 4, 5, 5})

### List.Random

Returns a list of count random numbers, with an optional seed parameter.

Syntax: List.Random(count as number, optional seed as nullable number) as list

Example: List.Random(3)

### List.Range

Returns a count items starting at an offset.

Syntax: List.Range(list as list, offset as number, optional count as nullable number) as list

Example: List.Range({1..10}, 6)

Answer: {7..10}

### List.RemoveFirstN

Returns a list with the specified number of elements removed from the list starting at the first element. The number of elements removed depends on the optional countOrCondition parameter.

Syntax: `List.RemoveFirstN(list as list, optional countOrCondition as any) as list`

Example: `List.RemoveFirstN({1, 2, 3, 4, 5}, 3)`

Example: `List.RemoveFirstN({5, 4, 2, 6, 1}, each _ > 3)`

### List.RemoveItems

Removes items from list1 that are present in list2, and returns a new list.

Syntax: `List.RemoveItems(list1 as list, list2 as list) as list`

Example: `List.RemoveItems({1, 2, 3, 4, 2, 5, 5}, {2, 4, 6})`

### List.RemoveLastN

Returns a list with the specified number of elements removed from the list starting at the last element. The number of elements removed depends on the optional countOrCondition parameter.

Syntax: `List.RemoveLastN(list as list, optional countOrCondition as any) as list`

Example: `List.RemoveLastN({1, 2, 3, 4, 5}, 3)`

### List.RemoveMatchingItems

Removes all occurrences of the given values in the list.

Syntax: `List.RemoveMatchingItems(list1 as list, list2 as list, optional equationCriteria as any) as list`

Example: `List.RemoveMatchingItems({1, 2, 3, 4, 5, 5}, {1, 5})`

### List.RemoveNulls

Removes null values from a list.

Syntax: `List.RemoveNulls(list as list) as list`

Example: `List.RemoveNulls({1, 2, 3, null, 4, 5, null, 6})`

### List.RemoveRange

Returns a list that removes count items starting at offset. The default count is 1.

Syntax: `List.RemoveRange(list as list, index as number, optional count as nullable number) as list`

Example: `List.RemoveRange({1, 2, 3, 4, -6, -2, -1, 5}, 4, 3)`

Answer: {1..5}

### List.Repeat

Returns a list that repeats the contents of an input list count times.

Syntax: `List.Repeat(list as list, count as number) as list`

Example: `List.Repeat({1, 2}, 3)`

### List.ReplaceMatchingItems

Replaces occurrences of existing values in the list with new values using the provided equationCriteria. Old and new values are provided by the replacements parameters. An optional equation criteria value can be specified to control equality comparisons. For details of replacement operations and equation criteria, see Parameter Values.

Syntax: `ist.ReplaceMatchingItems(list as list, replacements as list, optional equationCriteria as any) as list`

Example: `List.ReplaceMatchingItems({1, 2, 3, 4, 5}, {{5, -5}, {1, -1}})`

### List.ReplaceRange

Returns a list that replaces count values in a list with a replaceWith list starting at an index.

Syntax: `List.ReplaceRange(list as list, index as number, count as number, replaceWith as list) as list`

Example: `List.ReplaceRange({1, 2, 7, 8, 9, 5}, 2, 3, {3, 4})`

Answer: {1..5}

### List.ReplaceValue

Searches a list of values for the value and replaces each occurrence with the replacement value.

Syntax: List.ReplaceValue(list as list, oldValue as any, newValue as any, replacer as function) as list

Example: List.ReplaceValue({"a", "B", "a", "a"}, "a", "A", Replacer.ReplaceText)

### List.Reverse

Returns a list that reverses the items in a list.

Syntax: List.Reverse(list as list) as list

Example: List.Reverse({1..10})

### List.Select

Selects the items that match a condition.

Syntax: List.Select(list as list, selection as function) as list

Example: List.Select({1, -3, 4, 9, -2}, each \_ > 0)

### List.Single

Returns the single item of the list or throws an Expression.Error if the list has more than one item.

Syntax: List.Single(list as list) as any

Example: List.Single({1})

Answer: 1

Example: List.Single({1, 2, 3})

Answer: [Expression.Error] There were too many elements in the enumeration to complete the operation.

### List.SingleOrDefault

Returns a single item from a list.

Syntax: List.SingleOrDefault(list as list, optional default as any) as any

Example: List.SingleOrDefault({1})

Answer: 1 (other answers = null or default)

### List.Skip

Skips the first item of the list. Given an empty list, it returns an empty list. This function takes an optional parameter countOrCondition to support skipping multiple values.

Syntax: List.Skip(list as list, optional countOrCondition as any) as list

Example: List.Skip({1, 2, 3, 4, 5}, 3)

Example: List.Skip({5, 4, 2, 6, 1}, each \_ > 3)

### List.Sort

Returns a sorted list using comparison criterion.

Syntax: List.Sort(list as list, optional comparisonCriteria as any) as list

Example: List.Sort({2, 3, 1}, Order.Descending)

Example: List.Sort({2, 3, 1}, (x, y) => Value.Compare(1/x, 1/y))

### List.Split

Splits the specified list into a list of lists using the specified page size.

Syntax: List.Split(list as list, pageSize as number) as list

### List.StandardDeviation

Returns the standard deviation from a list of values. List.StandardDeviation performs a sample based estimate. The result is a number for numbers, and a duration for DateTimes and Durations.

Syntax: List.StandardDeviation(numbersList as list) as nullable number

Example: `List.StandardDeviation({1..5})`

### List.Sum

Excel equivalent: SUM

Returns the sum from a list.

Syntax: `List.Sum(list as list, optional precision as nullable number) as any`

Example: `List.Sum({1, 2, 3})`

Answer: 6

### List.Times

Returns a list of time values of size count, starting at start.

Syntax: `List.Times(start as time, count as number, step as duration) as list`

Example: `List.Times(#time(12, 0, 0), 4, #duration(0, 1, 0, 0))`

### List.Transform

Performs the function on each item in the list and returns the new list.

Syntax: `List.Transform(list as list, transform as function) as list`

Example: `List.Transform({1, 2}, each _ + 1)`

### List.TransformMany

Returns a list whose elements are projected from the input list.

Syntax: `List.TransformMany(list as list, collectionTransform as function, resultTransform as function) as list`

### List.Union

Returns a list from a list of lists and unions the items in the individual lists. The returned list contains all items in any input lists. Duplicate values are matched as part of the Union.

Syntax: `List.Union(lists as list, optional equationCriteria as any) as list`

Example: `List.Union({ {1..5}, {2..6}, {3..7} })`

Answer: {1..7}

### List.Zip

Returns a list of lists combining items at the same position.

Syntax: `List.Zip(lists as list) as list`

Example: `List.Zip({{1, 2}, {3, 4}})`

Example: `List.Zip({{1, 2}, {3}})`

### Logical.From

Returns a logical value from a value.

Syntax: `Logical.From(value as any) as nullable logical`

Example: `Logical.From(2)`

Answer: true

### Logical.FromText

Returns a logical value of true or false from a text value.

Syntax: `Logical.FromText(text as nullable text) as nullable logical`

Example: `Logical.FromText("true")`

Example: `Logical.FromText("a")`

Answer: [Expression.Error] Could not convert to a logical.



### Logical.ToText

Returns a text value from a logical value.

Syntax: Logical.ToText(logicalValue as nullable logical) as nullable text

Example: Logical.ToText(true)

Answer: TRUE

### MissingField.Error

An optional parameter in record and table functions indicating that missing fields should result in an error. (This is the default parameter value.)

Value: 0

### MissingField.Ignore

An optional parameter in record and table functions indicating that missing fields should be ignored.

Value: 1

### MissingField.UseNull

An optional parameter in record and table functions indicating that missing fields should be included as null values.

Value: 2

### MySQL.Database

Returns a table with data relating to the tables in the specified MySQL Database.

Syntax: MySQL.Database(server as text, database as text, optional options as nullable record) as table

### Number.Abs

Excel equivalent: ABS

Returns the absolute value of a number.

Syntax: Number.Abs(number as nullable number) as nullable number

Example: Number.Abs(-9)

### Number.Acos

Excel equivalent: ACOS

Returns the arccosine of a number.

Syntax: Number.Acos(number as nullable number) as nullable number

### Number.Asin

Excel equivalent: ASIN

Returns the arcsine of a number.

Syntax: Number.Asin(number as nullable number) as nullable number

### Number.Atan

Excel equivalent: ATAN

Returns the arctangent of a number.

Syntax: Number.Atan(number as nullable number) as nullable number

### Number.Atan2

Excel equivalent: ATAN2

Returns the arctangent of the division of two numbers.

Syntax: Number.Atan2(y as nullable number, x as nullable number) as nullable number

## Number.BitwiseAnd

Excel equivalent: BITAND

Returns the result of a bitwise AND operation on the provided operands.

Syntax: Number.BitwiseAnd(number1 as nullable number, number2 as nullable number) as nullable number

## Number.BitwiseNot

Excel equivalent: Bitwise

Returns the result of a bitwise NOT operation on the provided operands.

Syntax: Number.BitwiseNot(number as any) as any

## Number.BitwiseOr

Excel equivalent: BITOR

Returns the result of a bitwise OR operation on the provided operands.

Syntax: Number.BitwiseOr(number1 as nullable number, number2 as nullable number) as nullable number

## Number.BitwiseShiftLeft

Excel equivalent: BITLSHIFT

Returns the result of a bitwise shift left operation on the operands.

Syntax: Number.BitwiseShiftLeft(number1 as nullable number, number2 as nullable number) as nullable number

## Number.BitwiseShiftRight

Excel equivalent: BITRSHIFT

Returns the result of a bitwise shift right operation on the operands.

Syntax: Number.BitwiseShiftRight(number1 as nullable number, number2 as nullable number) as nullable number

## Number.BitwiseXor

Excel equivalent: BITXOR

Returns the result of a bitwise XOR operation on the provided operands.

Syntax: Number.BitwiseXor(number1 as nullable number, number2 as nullable number) as nullable number

## Number.Combinations

Excel equivalent: Miscellaneous

Returns the number of combinations of a given number of items for the optional combination size.

Syntax: Number.Combinations(setSize as nullable number, combinationSize as nullable number) as nullable number

Example: Number.Combinations(5, 3)

## Number.Cos

Excel equivalent: Trigonometric Function

Returns the cosine of a number.

Syntax: Number.Cos(number as nullable number) as nullable number

Example: Number.Cos(0)

## Number.Cosh

Excel equivalent: Trigonometric Function

Returns the hyperbolic cosine of a number.

Syntax: `Number.Cosh(number as nullable number) as nullable number`

### Number.E

Returns 2.7182818284590451, the value of e up to 16 decimal digits.

### Number.Epsilon

Returns the smallest possible number.

Value: 0

### Number.Exp

Excel equivalent: EXP

Returns a number representing e raised to a power.

Syntax: `Number.Exp(number as nullable number) as nullable number`

Example: `E (2.7182818...)`

### Number.Factorial

Excel equivalent: FACT

Returns the factorial of a number.

Syntax: `Number.Factorial(number as nullable number) as nullable number`

Example: `Number.Factorial(10)`

### Number.From

Excel equivalent: Converts to Number from Number, Text, Logical (0 or 1), datetime, datetimezone, date, time and duration

Returns a number value from a value.

Syntax: `Number.From(value as any, optional culture as nullable text) as nullable number`

Example: `Number.From("5")`

`Number.From(#datetime(2021, 4, 21, 7, 1, 2))`

`Number.From("25.6%")`

### Number.FromText

Returns a number value from a text value.

Syntax: `Number.FromText(text as nullable text, optional culture as nullable text) as nullable number`

Example: `Number.FromText("5.0e-10")`

### Number.IntegerDivide

Divides two numbers and returns the whole part of the resulting number.

Syntax: `Number.IntegerDivide(number1 as nullable number, number2 as nullable number, optional precision as nullable number) as nullable number`

Example: `Number.IntegerDivide(8.3, 3) = 2`

### Number.IsEven

Returns true if a value is an even number.

Syntax: `Number.IsEven(number as number) as logical`

Example: `Number.IsEven(625)`

Answer: False

### Number.IsNaN

Returns true if a value is Number.NaN.

Syntax: `Number.IsNaN(number as number) as logical`

Example: `Number.IsNaN(number as number) as logical`

Answer: True

### Number.IsOdd

Returns true if a value is an odd number.

Syntax: `Number.IsOdd(number as number)` as logical

Example: `Number.IsOdd(625)`

Answer: True

### Number.Ln

Excel equivalent: LN

Returns the natural logarithm of a number.

Syntax: `Number.Ln(number as nullable number)` as nullable number

### Number.Log

Excel equivalent: LOG

Returns the logarithm of a number to the base.

Syntax: `Number.Log(number as nullable number, optional base as nullable number [Number.Exp])` as nullable number

Example: `Number.Log(2, 10)`

Answer: 0.3010299956639812

### Number.Log10

Excel equivalent: LOG10

Returns the base-10 logarithm of a number.

Syntax: `Number.Log10(number as nullable number)` as nullable number

Example: `Number.Log10(2)`

### Number.Mod

Excel equivalent: MOD

Divides two numbers and returns the remainder of the resulting number.

Syntax: `Number.Mod(number as nullable number, divisor as nullable number, optional precision as nullable number)` as nullable number

Example: `Number.Mod(5, 3)`

### Number.NaN

Excel equivalent: 0 divided by 0

Represents 0/0.

### Number.NegativeInfinity

Excel equivalent: -1 divided by 0

Represents -1/0.

### Number.Permutations

Returns the number of total permutatons of a given number of items for the optional permutation size.

Syntax: `Number.Permutations(setSize as nullable number, permutationSize as nullable number)` as nullable number

Example: `Number.Permutations(5, 3)`

### Number.PI

Excel equivalent: PI (3.1415)

Returns 3.1415926535897931, the value for Pi up to 16 decimal digits.

### Number.PositiveInfinity

Excel equivalent: 1 divided by 0

Represents 1/0.

### Number.Power

Excel equivalent: POWER

Returns a number raised by a power.

Syntax: Number.Power(number as nullable number, power as nullable number) as nullable number

Example: Number.Power(5, 3)

### Number.Random

Excel equivalent: RAND()

Returns a random fractional number between 0 and 1.

Syntax: Number.Random()

Example: 0.919303

### Number.RandomBetween

Excel equivalent: RANDBETWEEN

Returns a random number between the two given number values.

Syntax: Number.RandomBetween(bottom as number, top as number) as number

Example: 2.546797

### Number.Round

Excel equivalent: ROUND

Returns a nullable number (n) if value is an integer.

Syntax: Number.Round(number as nullable number, optional digits as nullable number [0], optional roundingMode as nullable number) as nullable number

Example: Number.Round(1.2345, 3, RoundingMode.Up) Number.Round(1.2345, 3, RoundingMode.Down)

### Number.RoundAwayFromZero

Excel equivalent: ROUNDUP

Returns Number.RoundUp(value) when value >= 0 and Number.RoundDown(value) when value < 0.

Syntax: Number.RoundAwayFromZero(number as nullable number [0], optional digits as nullable number) as nullable number

Example: Number.RoundAwayFromZero(-1.234, 2)

### Number.RoundDown

Excel equivalent: FLOOR

Returns the largest integer less than or equal to a number value.

Syntax: Number.RoundDown(number as nullable number, optional digits as nullable number) as nullable number

Example: Number.RoundDown(1.999, 2)

Answer: 1.99

### Number.RoundTowardZero

Excel equivalent: ROUNDDOWN

Returns Number.RoundDown(x) when x >= 0 and Number.RoundUp(x) when x < 0.

Syntax: `Number.RoundTowardZero(number as nullable number, optional digits as nullable number) as nullable number`

### Number.RoundUp

Excel equivalent: CEILING

Returns the larger integer greater than or equal to a number value.

Syntax: `Number.RoundUp(number as nullable number, optional digits as nullable number) as nullable number`

Example: `Number.RoundUp(1.234)`

Example: `Number.RoundUp(1.999)`

Example: `Number.RoundUp(1.234, 2)`

### Number.Sign

Excel equivalent: SIGN

Returns 1 for positive numbers, -1 for negative numbers or 0 for zero.

Syntax: `Number.Sign(number as nullable number) as nullable number`

Example: `Number.Sign(182)`

Example: `Number.Sign(-182)`

Example: `Number.Sign(0)`

### Number.Sin

Excel equivalent: SIN

Returns the sine of a number.

Syntax: `Number.Sin(number as nullable number) as nullable number`

Example: `Number.Sin(0)`

### Number.Sinh

Excel equivalent: SINH

Returns the hyperbolic sine of a number.

Syntax: `Number.Sinh(number as nullable number) as nullable number`

### Number.Sqrt

Excel equivalent: SQRT

Returns the square root of a number.

Syntax: `Number.Sqrt(number as nullable number) as nullable number`

Example: `Number.Sqrt(625)`

Example: `Number.Sqrt(85)`

Answer: 9.21954445729288

### Number.Tan

Excel equivalent: TAN

Returns the tangent of a number.

Syntax: `Number.Tan(number as nullable number) as nullable number`

Example: `Number.Tan(1)`

Answer: 1.5574077246549

### Number.Tanh

Excel equivalent: TANH

Returns the hyperbolic tangent of a number.

Syntax: `Number.Tanh(number as nullable number) as nullable number`

## Number.ToText

Returns a text value from a number value.

Syntax: Number.ToText(number as nullable number, optional format as nullable text, optional culture as nullable text) as nullable text

Example: Format = D (decimal), E (exponential/scientific), F (fixed-point), G (General), N (#,###.## Number), P (Percent), R (round-trip), X (hexadecimal). Followed by a number precision specifier (e.g. P1).

## Occurrence.All

A list of positions of all occurrences of the found values is returned.

Value: 2

## Occurrence.First

The position of the first occurrence of the found value is returned.

Value: 0

## Occurrence.Last

The position of the last occurrence of the found value is returned.

Value: 1

## Occurrence.Optional

The item is expected to appear zero or one time in the input.

Value: 0

## Occurrence.Repeating

The item is expected to appear zero or more times in the input.

Value: 2

## Occurrence.Required

The item is expected to appear once in the input.

Value: 1

## OData.Feed

Returns a table of OData feeds offered by an OData serviceUri.

Syntax: OData.Feed(serviceUri as text, optional headers as nullable record, optional options as any) as

## ODataOmitValues.Nulls

Allows the OData service to omit null values.

## Odbc.DataSource

Returns a table of SQL tables and views from the ODBC data source specified by the connection string connectionString.

Syntax: Odbc.DataSource(connectionString as any, optional options as nullable record) as table

## Odbc.InferOptions

Returns the result of trying to infer SQL capabilities for an ODBC driver.

Syntax: Odbc.InferOptions(connectionString as any) as record

### Odbc.Query

Connects to a generic provider with the given connection string and returns the result of evaluating the query.

Syntax: Odbc.Query(connectionString as any, query as text, optional options as nullable record) as table

### OleDb.DataSource

Returns a table of SQL tables and views from the OLE DB data source specified by the connection string.

Syntax: OleDb.DataSource(connectionString as any, optional options as nullable record) as table

### OleDb.Query

Returns the result of running a native query on an OLE DB data source.

Syntax: OleDb.Query(connectionString as any, query as text, optional options as nullable record) as table

### Oracle.Database

Returns a table with data relating to the tables in the specified Oracle Database.

Syntax: Oracle.Database(server as text, optional options as nullable record) as table

### Order.Ascending

Value: 0

### Order.Descending

Value: 1

### Percentage.From

Returns a percentage value from the given value.

Syntax: Percentage.From(value as any, optional culture as nullable text) as nullable number

Example: Percentage.From("12.3%")

Answer: 0.123

### PostgreSQL.Database

Returns a table with data relating to the tables in the specified PostgreSQL Database.

Syntax: PostgreSQL.Database(server as text, database as text, optional options as nullable record) as

### Precision.Decimal

An optional parameter for the built-in arithmetic operators to specify decimal precision.

Value: 1

### Precision.Double

An optional parameter for the built-in arithmetic operators to specify double precision.

Value: 0

### QuoteStyle.Csv

Quote characters indicate the start of a quoted string. Nested quotes are indicated by two quote characters.

Value: 1



## QuoteStyle.None

Quote characters have no significance.

Value: 0

## RData.FromBinary

Returns a record of data frames from the RData file.

Syntax: `RData.FromBinary(stream as binary)` as any

## Record.AddField

Adds a field from a field name and value.

Syntax: `Record.AddField(record as record, fieldName as text, value as any, optional delayed as nullable)`

Example: `Record.AddField([CustomerID = 1, Name = "Bob", Phone = "123-4567"], "Address", "123 Main St.")`

Answer: CUSTOMERID 1

## Record.Combine

Combines the records in a list.

Syntax: `Record.Combine(records as list)` as record

Example: `Record.Combine({ [CustomerID =1, Name ="Bob"] , [Phone = "123-4567"]})`

Answer: CUSTOMERID 1

## Record.Field

Returns the value of the given field. This function can be used to dynamically create field lookup syntax for a given record. In that way it is a dynamic version of the `record[field]` syntax.

Syntax: `Record.Field(record as record, field as text)` as any

Example: `Record.Field([CustomerID = 1, Name = "Bob", Phone = "123-4567"], "CustomerID")`

## Record.FieldCount

Returns the number of fields in a record.

Syntax: `Record.FieldCount(record as record)` as number

Example: `Record.FieldCount([CustomerID = 1, Name = "Bob"])`

## Record.FieldNames

Returns a list of field names in order of the record's fields.

Syntax: `Record.FieldNames(record as record)` as list

Example: `Record.FieldNames([OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0])`

## Record.FieldOrDefault

Returns the value of a field from a record, or the default value if the field does not exist.

Syntax: `Record.FieldOrDefault(record as nullable record, field as text, optional defaultValue as any)` as

Example: `Record.FieldOrDefault([CustomerID =1, Name="Bob"], "Phone")`

Example: `Record.FieldOrDefault([CustomerID =1, Name="Bob"], "Phone", "123-4567")`

## Record.FieldValues

Returns a list of field values in order of the record's fields.

Syntax: `Record.FieldValues(record as record)` as list

Example: `Record.FieldValues([CustomerID = 1, Name = "Bob", Phone = "123-4567"])`

## Record.FromList

Returns a record given a list of field values and a set of fields.

Syntax: `Record.FromList(list as list, fields as any) as record`

Example: `Record.FromList([1, "Bob", "123-4567"], {"CustomerID", "Name", "Phone"})`

## Record.FromTable

Returns a record from a table of records containing field names and values.

Syntax: `Record.FromTable(table as table) as record`

Example: `Record.FromTable(Table.FromRecords([{"Name = "CustomerID", Value = 1}, {"Name = "Name", Value = "Bob"}, {"Name = "Phone", Value = "123-4567"}]))`

## Record.HasFields

Returns true if the field name or field names are present in a record.

Syntax: `Record.HasFields(record as record, fields as any) as logical`

Example: `Record.HasFields([CustomerID = 1, Name = "Bob", Phone = "123-4567"], "CustomerID")`

Example: `Record.HasFields([CustomerID = 1, Name = "Bob", Phone = "123-4567"], {"CustomerID", "Address"})`

## Record.RemoveFields

Returns a new record that reorders the given fields with respect to each other. Any fields not specified remain in their original locations.

Syntax: `Record.RemoveFields(record as record, fields as any, optional missingField as nullable number) as`

Example: `Record.RemoveFields([CustomerID=1, Item = "Fishing rod", Price=18.00], "Price")`

Answer: CUSTOMERID 1

Example: `Record.RemoveFields([CustomerID=1, Item = "Fishing rod", Price=18.00], {"Price", "Item"})`

Answer: CUSTOMERID 1

## Record.RenameFields

Returns a new record that renames the fields specified. The resultant fields will retain their original order. This function supports swapping and chaining field names. However, all target names plus remaining field names must constitute a unique set or an error will occur.

Syntax: `Record.RenameFields(record as record, renames as list, optional missingField as nullable number)`

Example: `Record.RenameFields([OrderID = 1, CustomerID = 1, Item = "Fishing rod", UnitPrice = 100.0],`

Answer: `{"UnitPrice", "Price"})`

Example: `Record.RenameFields([OrderNum = 1, CustomerID = 1, Item = "Fishing rod", UnitPrice = 100.0], {"UnitPrice",`

Answer: `"Price"}, {"OrderNum", "OrderID"})`

## Record.ReorderFields

Returns a new record that reorders fields relative to each other. Any fields not specified remain in their original locations. Requires two or more fields.

Syntax: `Record.ReorderFields(record as record, fieldOrder as list, optional missingField as nullable`

Example: `Record.ReorderFields([CustomerID= 1, OrderID = 1, Item = "Fishing rod", Price = 100.0], {"OrderID",`

Answer: `"CustomerID"})`

### Record.SelectFields

Returns a new record that contains the fields selected from the input record. The original order of the fields is maintained.

Syntax: Record.SelectFields(record as record, fields as any, optional missingField as nullable number) as

Example: Record.SelectFields( [OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0] , {"Item", "Price"})

Answer: ITEM Fishing rod

### Record.ToList

Returns a list of values containing the field values of the input record.

Syntax: Record.ToList([A = 1, B = 2, C = 3])

Example: Record.ToList([A = 1, B = 2, C = 3])

### Record.ToTable

Returns a table of records containing field names and values from an input record.

Syntax: Record.ToTable(record as record) as table

Example: Record.ToTable([OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0])

Answer: NAME VALUE

### Record.TransformFields

Transforms fields by applying transformOperations. For more more information about values supported by transformOperations, see Parameter Values.

Syntax: Record.TransformFields(record as record, transformOperations as list, optional missingField as nullable number) as record

Example: Record.TransformFields( [OrderID ="1", CustomerID= 1, Item = "Fishing rod", Price = "100.0"], [{"OrderID", Number.FromText}, {"Price",Number.FromText}])

### RelativePosition.FromEnd

Indicates indexing should be done from the end of the input.

Value: 1

### RelativePosition.FromStart

Indicates indexing should be done from the start of the input.

Value: 0

### Replacer.ReplaceText

Excel equivalent: SUBSTITUTE

This function be provided to List.ReplaceValue or Table.ReplaceValue to do replace of text values in list and table values respectively.

Syntax: Replacer.ReplaceText(text as nullable text, old as text, new as text) as nullable text

Example: Replacer.ReplaceText("hEllo world", "hE", "He")

### Replacer.ReplaceValue

Excel equivalent: SUBSTITUTE for numbers

This function be provided to List.ReplaceValue or Table.ReplaceValue to do replace values in list and table values respectively.

Syntax: Replacer.ReplaceValue(value as any, old as any, new as any) as any

Example: Replacer.ReplaceValue(11, 11, 10)

Resource.Access

RoundingMode.AwayFromZero

RoundingMode.AwayFromZero

Value: 2

RoundingMode.Down

RoundingMode.Down

Value: 1

RoundingMode.ToEven

RoundingMode.ToEven

Value: 4

RoundingMode.TowardZero

RoundingMode.TowardZero

Value: 3

RoundingMode.Up

RoundingMode.Up

Value: 0

RowExpression.Column

Returns an AST that represents access to a column within a row expression.

Syntax: RowExpression.Column(columnName as text) as record

Example: KIND FieldAccess

Answer: EXPRESSION [Record]

RowExpression.From

Returns the AST for the body of a function.

Syntax: RowExpression.From(function as function) as record

Example: RowExpression.From(each [CustomerName] = "ALFKI")

Answer: KIND Binary

RowExpression.Row

An AST node representing the row in a row expression.

Salesforce.Data

Connects to the Salesforce Objects API and returns the set of available objects (i.e. Accounts).

Syntax: Salesforce.Data(optional loginUrl as any, optional options as nullable record) as table

Salesforce.Reports

Connects to the Salesforce Reports API and returns the set of available reports.

Syntax: Salesforce.Reports(optional loginUrl as nullable text, optional options as nullable record) as

SapBusinessWarehouse.Cubes

Returns the InfoCubes and queries in an SAP Business Warehouse system grouped by InfoArea.

Syntax: SapBusinessWarehouse.Cubes(server as text, systemNumberOrSystemId as text, clientId as text,

SapBusinessWarehouseExecutionMode.BasXml

'bXML flattening mode' option for MDX execution in SAP Business Warehouse.

Value: 64

SapBusinessWarehouseExecutionMode.BasXmlGzip

'Gzip compressed bXML flattening mode' option for MDX execution in SAP Business Warehouse.

Recommended for low latency or high volume queries.

Value: 65

SapBusinessWarehouseExecutionMode.DataStream

'DataStream flattening mode' option for MDX execution in SAP Business Warehouse.

Value: 66

SapHana.Database

Returns the packages in an SAP HANA database.

Syntax: SapHana.Database(\*\*server\*\* as text, optional \*\*options\*\* as nullable record) as table

SapHanaDistribution.All

Returns the packages in an SAP HANA database.

Value: 3

SapHanaDistribution.Connection

'Connection' distribution option for SAP HANA.

Value: 1

SapHanaDistribution.Off

'Off' distribution option for SAP HANA.

Value: 0

SapHanaDistribution.Statement

'Statement' distribution option for SAP HANA.

Value: 2

SapHanaRangeOperator.Equals

'Equals' range operator for SAP HANA input parameters.

Value: 4

SapHanaRangeOperator.GreaterThan

'Greater than' range operator for SAP HANA input parameters.

Value: 0

SapHanaRangeOperator.GreaterThanOrEquals

'Greater than or equals' range operator for SAP HANA input parameters.

Value: 2

SapHanaRangeOperator.LessThan

'Less than' range operator for SAP HANA input parameters.

Value: 1

### SapHanaRangeOperator.LessThanOrEquals

'Less than or equals' range operator for SAP HANA input parameters.

Value: 3

### SapHanaRangeOperator.NotEquals

'Not equals' range operator for SAP HANA input parameters.

Value: 5

### SharePoint.Contents

Returns a table containing a row for each folder and document found at the SharePoint site url. Each row contains properties of the folder or file and a link to its content.

Syntax: SharePoint.Contents(url as text, optional options as nullable record) as table

### SharePoint.Files

Returns a table containing a row for each document found at the SharePoint site url, and subfolders. Each row contains properties of the folder or file and a link to its content.

Syntax: SharePoint.Files(url as text, optional options as nullable record) as table

### SharePoint.Tables

Returns a table containing the result of a SharePoint List as an OData feed.

Syntax: SharePoint.Tables(url as text, optional options as nullable record) as table

### Single.From

Returns a Single number value from the given value.

Syntax: Single.From(value as any, optional culture as nullable text) as nullable number

Example: Single.From("1.5")

Answer: 1.5

### Soda.Feed

Returns the resulting table of a CSV file that can be accessed using the SODA 2.0 API. The URL must point to a valid SODA-compliant source that ends in a .csv extension.

Syntax: Soda.Feed(url as text) as table

### Splitter.SplitByNothing

Returns a function that does no splitting, returning its argument as a single element list.

Syntax: Splitter.SplitByNothing() as function

### Splitter.SplitTextByAnyDelimiter

Returns a function that splits text by any supported delimiter.

Syntax: Splitter.SplitTextByAnyDelimiter(delimiters as list, optional quoteStyle as nullable number,

### Splitter.SplitTextByCharacterTransition

Returns a function that splits text into a list of text according to a transition from one kind of character to another.

Syntax: Splitter.SplitTextByCharacterTransition(before as anynonnull, after as anynonnull) as function

### Splitter.SplitTextByDelimiter

Returns a function that will split text according to a delimiter.

Syntax: Splitter.SplitTextByDelimiter(delimiter as text, optional quoteStyle as nullable number) as

### Splitter.SplitTextByEachDelimiter

Returns a function that splits text by each delimiter in turn.

Syntax: Splitter.SplitTextByEachDelimiter(delimiters as list, optional quoteStyle as nullable number,

### Splitter.SplitTextByLengths

Returns a function that splits text according to the specified lengths.

Syntax: Splitter.SplitTextByLengths(lengths as list, optional startAtEnd as nullable logical) as function

### Splitter.SplitTextByPositions

Returns a function that splits text according to the specified positions.

Syntax: Splitter.SplitTextByPositions(positions as list, optional startAtEnd as nullable logical) as

### Splitter.SplitTextByRanges

Returns a function that splits text according to the specified ranges.

Syntax: Splitter.SplitTextByRanges(ranges as list, optional startAtEnd as nullable logical) as function

### Splitter.SplitTextByRepeatedLengths

Returns a function that splits text into a list of text after the specified length repeatedly.

Syntax: Splitter.SplitTextByRepeatedLengths(length as number, optional startAtEnd as nullable logical) as

### Splitter.SplitTextByWhitespace

Returns a function that splits text according to whitespace.

Syntax: Splitter.SplitTextByWhitespace(optional quoteStyle as nullable number) as function

### Sql.Database

Returns a table containing SQL tables located on a SQL Server instance database.

Syntax: Sql.Database(server as text, database as text, optional options as nullable record) as table

### Sql.Databases

Returns a table with references to databases located on a SQL Server instance. Returns a navigation table.

Syntax: Sql.Databases(server as text, optional options as nullable record) as table

### SqlExpression.SchemaFrom

SqlExpression.SchemaFrom

Syntax: SqlExpression.SchemaFrom(schema as any) as any

### SqlExpression.ToExpression

SqlExpression.ToExpression

Syntax: SqlExpression.ToExpression(sql as text, environment as record) as text

### Sybase.Database

Returns a table with data relating to the tables in the specified Sybase Database.

Syntax: Sybase.Database(server as text, database as text, optional options as nullable record) as table

### Table.AddColumn

Adds a column named newColumnName to a table.

Syntax: `Table.AddColumn(table as table, newColumnName as text, columnGenerator as function, optional`

Example: `Table.AddColumn(Table.FromRecords({[OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0, Shipping`

Answer: `= 10.00], [OrderID = 2, CustomerID = 1, Item = "1 lb. worms", Price = 5.0, Shipping = 15.00], [OrderID = 3,`

### Table.AddIndexColumn

Returns a table with a new column with a specific name that, for each row, contains an index of the row in the table.

Syntax: `Table.AddIndexColumn(table as table, newColumnName as text, optional initialValue as nullable`

Example: `Table.AddIndexColumn(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2,`

Answer: `Name = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name`

Example: `Table.AddIndexColumn(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2,`

Answer: `Name = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name`

### Table.AddJoinColumn

Performs a nested join between table1 and table2 from specific columns and produces the join result as a newColumnName column for each row of table1.

Syntax: `Table.AddJoinColumn(table1 as table, key1 as any, table2 as function, key2 as any, newColumnName`

Example: `Table.AddJoinColumn(Table.FromRecords({[saleID = 1, item = "Shirt"], [saleID = 2, item = "Hat"]}), "saleID",`

Answer: `() => Table.FromRecords({[saleID = 1, price = 20, stock = 1234], [saleID = 2, price = 10, stock = 5643]}),`

### Table.AddKey

Add a key to table.

Syntax: `Table.AddKey(table as table, columns as list, isPrimary as logical) as table`

Example: `let tableType = type table [Id = Int32.Type, Name = text], table = Table.FromRecords({[Id = 1, Name = "Hello`

Answer: `There"], [Id = 2, Name = "Good Bye"]}), resultTable = Table.AddKey(table, {"Id"}, true) in resultTable`

### Table.AggregateTableColumn

Aggregates tables nested in a specific column into multiple columns containing aggregate values for those tables.

Syntax: `Table.AggregateTableColumn(table as table, column as text, aggregations as list) as table`

Example: `[t.a] , the min and max of [t.b] , and the count of values in [t.a] .`

Answer: `Table.AggregateTableColumn(Table.FromRecords({[t = Table.FromRecords({[a=1, b=2, c=3], [a=2,b=4,c=6]}]), b =`

### Table.AlternateRows

Returns a table containing an alternating pattern of the rows from a table.

Syntax: `Table.AlternateRows(table as table, offset as number, skip as number, take as number) as table`



Example: `Table.AlternateRows(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Answer: Name = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"]}), 1, 1, 1)`

### Table.Buffer

Buffers a table into memory, isolating it from external changes during evaluation.

Syntax: `Table.Buffer(table as table) as table`

### Table.Column

Returns the values from a column in a table.

Syntax: `Table.Column(table as table, column as text) as list`

Example: `Table.Column(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Name = Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =`

### Table.ColumnCount

Returns the number of columns in a table.

Syntax: `Table.ColumnCount(table as table) as number`

Example: `Table.ColumnCount(Table.FromRecords({[CustomerID =1, Name ="Bob", Phone = "123-4567"]},[CustomerID =2, Name Answer: ="Jim", Phone = "987-6543"],[CustomerID =3, Name ="Paul", Phone = "543-7890"]}))`

### Table.ColumnNames

Returns the names of columns from a table.

Syntax: `Table.ColumnNames(table as table) as list`

Example: `Table.ColumnNames(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Answer: Name = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 4,`

### Table.ColumnsOfType

Returns a list with the names of the columns that match the specified types.

Syntax: `Table.ColumnsOfType(table as table, listOfTypes as list) as list`

Example: `Table.ColumnsOfType(Table.FromRecords({[a=1,b="hello"]}, type table[a=Number.Type, b=Text.Type]), {type Answer: number})`

### Table.Combine

Returns a table that is the result of merging a list of tables. The tables must all have the same row type structure.

Syntax: `Table.Combine(tables as list, optional columns as any) as table`

Example: `Table.Combine({Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}),`

Answer: `Table.FromRecords({[CustomerID = 2, Name = "Jim", Phone = "987-6543"]`

`}),Table.FromRecords({[CustomerID = 3,`

Example: `Table.Combine({Table.FromRecords({[Name="Bob",Phone="123-4567"]}),`

`Table.FromRecords({[Fax="987-6543",`

Answer: `Phone="838-7171"] }),Table.FromRecords({[Cell = "543-7890"]}))`

Example: `Phone="838-7171"] }),Table.FromRecords({[Cell = "543-7890"]}), {"CustomerID", "Name"})`

Answer: CUSTOMERID NAME

### Table.CombineColumns

Table.CombineColumns merges columns using a combiner function to produce a new column.

Table.CombineColumns is the inverse of Table.SplitColumns.

Syntax: Table.CombineColumns(table as table, sourceColumns as list, combiner as function, column as text)

### Table.Contains

Determines whether a record appears as a row in the table.

Syntax: Table.Contains(table as table, row as record, optional equationCriteria as any) as logical

Example: Table.Contains(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"],

[CustomerID = 4, Name =

Example: Table.Contains(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"],

[CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"],

[CustomerID = 4, Name =

Example: Table.Contains(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"],

[CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"],

[CustomerID = 4, Name =

### Table.ContainsAll

Determines whether all of the specified records appear as rows in the table.

Syntax: Table.ContainsAll(table as table, rows as list, optional equationCriteria as any) as logical

Example: Table.ContainsAll( Table.FromRecords( { [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2,

Answer: Name = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"]

, [CustomerID = 4,

Example: Table.ContainsAll( Table.FromRecords( { [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2,

Answer: Name = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"]

, [CustomerID = 4,

### Table.ContainsAny

Determines whether any of the specified records appear as rows in the table.

Syntax: Table.ContainsAny(table as table, rows as list, optional equationCriteria as any) as logical

Example: Table.ContainsAny(Table.FromRecords({[a = 1, b = 2], [a = 3, b = 4]}), {[a = 1, b = 2], [a = 3, b = 5]})

Answer: TRUE

Example: Table.ContainsAny(Table.FromRecords({[a = 1, b = 2], [a = 3, b = 4]}), {[a = 1, b = 3], [a = 3, b = 5]})

Answer: FALSE

Example: or [a = 3, b = 5] comparing only the column [a].

Answer: Table.ContainsAny(Table.FromRecords({[a = 1, b = 2], [a = 3, b = 4]}), {[a = 1, b = 3], [a = 3, b = 5]}, "a")

### Table.DemoteHeaders

Demotes the header row down into the first row of a table.

Syntax: `Table.DemoteHeaders(table as table) as table`

Example: `Table.DemoteHeaders(Table.FromRecords({[CustomerID=1, Name="Bob", Phone="123-4567"],[CustomerID=2, Name="Jim",`

Answer: `Phone="987-6543"]}))`

## Table.Distinct

Removes duplicate rows from a table, ensuring that all remaining rows are distinct.

Syntax: `Table.Distinct(table as table, optional equationCriteria as any) as table`

Example: `Table.Distinct(Table.FromRecords({[a = "A", b = "a"], [a = "B", b = "b"], [a = "A", b = "a"]}))`

Answer: A B

Example: `([a = "A", b = "a"], [a = "B", b = "a"], [a = "A", b = "b"])`

Answer: `Table.Distinct(Table.FromRecords({[a = "A", b = "a"], [a = "B", b = "a"], [a = "A", b = "b"]}), "b")`

## Table.DuplicateColumn

Duplicates a column with the specified name. Values and type are copied from the source column.

Syntax: `Table.DuplicateColumn(table as table, columnName as text, newColumnName as text, optional`

## Table.ExpandListColumn

Given a column of lists in a table, create a copy of a row for each value in its list.

Syntax: `Table.ExpandListColumn(table as table, column as text) as table`

Example: `Table.ExpandListColumn(Table.FromRecords({[Name= {"Bob", "Jim", "Paul"}, Discount = .15]}), "Name")`

Answer: NAME DISCOUNT

## Table.ExpandRecordColumn

Expands a column of records into columns with each of the values.

Syntax: `Table.ExpandRecordColumn(table as table, column as text, fieldNames as list, optional`

Example: `Table.ExpandRecordColumn(Table.FromRecords({[a = [aa = 1, bb = 2, cc = 3], b = 2]}), "a", {"aa", "bb", "cc"})`

Answer: AA BB CC B

## Table.ExpandTableColumn

Expands a column of records or a column of tables into multiple columns in the containing table.

Syntax: `Table.ExpandTableColumn(table as table, column as text, columnNames as list, optional`

Example: `[t.a], [t.b]` and `[t.c]` .

Answer: `Table.ExpandTableColumn(Table.FromRecords({[t = Table.FromRecords({[a=1, b=2, c=3],[a=2,b=4,c=6]}), b = 2]}),`

## Table.FillDown

Replaces null values in the specified column or columns of the table with the most recent non-null value in the column.

Syntax: `Table.FillDown(table as table, columns as list) as table`

Example: `Table.FillDown(Table.FromRecords({[Place=1, Name="Bob"], [Place=null, Name="John"], [Place=2, Name="Brad"],`

Answer: `[Place=3, Name="Mark"], [Place=null, Name="Tom"], [Place=null, Name="Adam"]]), {"Place"})`

### Table.FillUp

Returns a table from the table specified where the value of the next cell is propagated to the null values cells above in the column specified.

Syntax: Table.FillUp(table as table, columns as list) as table

Example: Table.FillUp(Table.FromRecords([Column1 = 1, Column2 = 2], [Column1 = 3, Column2 = null], [Column1 = 5,

Answer: Column2 = 3])), {"Column2"})

### Table.FilterWithDataTable

0

Syntax: Table.FilterWithDataTable(\*\*table\*\* as table, \*\*dataTableIdentifier\*\* as text) as any

### Table.FindText

Returns a table containing only the rows that have the specified text within one of their cells or any part thereof.

Syntax: Table.FindText(table as table, text as text) as table

Example: Table.FindText(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =

### Table.First

Returns the first row from a table.

Syntax: Table.First(table as table, optional default as any) as any

Example: Table.First(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543" , [CustomerID = 3, Name = "Paul", Phone = "543-7890"]]))

Example: Table.First(Table.FromRecords({}), [a = 0, b = 0])

Answer: A 0

### Table.FirstN

Returns the first row(s) of a table, depending on the countOrCondition parameter.

Syntax: Table.FirstN(table as table, countOrCondition as any) as table

Example: Table.FirstN(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543" , [CustomerID = 3, Name = "Paul", Phone = "543-7890"])), 2)

Example: Table.FirstN(Table.FromRecords([a = 1, b = 2], [a = 3, b = 4], [a = -5, b = -6])), each [a] > 0)

Answer: A B

### Table.FirstValue

Returns the first column of the first row of the table or a specified default value.

Syntax: Table.FirstValue(table as table, optional default as any) as any

### Table.FromColumns

Returns a table from a list containing nested lists with the column names and values.

Syntax: Table.FromColumns(lists as list, optional columns as any) as table

Example: Table.FromColumns([1, "Bob", "123-4567"], [2, "Jim", "987-6543"], [3, "Paul", "543-7890"]])

Answer: COLUMN1 COLUMN2 COLUMN3

Example: Table.FromColumns([1, "Bob", "123-4567"], [2, "Jim", "987-6543"], [3, "Paul", "543-7890"]), {"CustomerID",

Answer: "Name", "Phone")}

Example: Table.FromColumns({ {1, 2, 3}, {4, 5}, {6, 7, 8, 9} }, {"column1", "column2", "column3"})

Answer: COLUMN1 COLUMN2 COLUMN3

## Table.FromList

Converts a list into a table by applying the specified splitting function to each item in the list.

Syntax: Table.FromList(list as list, optional splitter as nullable function, optional columns as any,

Example: Table.FromList({"a", "b", "c", "d"}, null, {"Letters"})

Example: Table.FromList({[CustomerID=1,Name="Bob"],[CustomerID=2,Name="Jim"]},

Record.FieldValues, {"CustomerID",

Answer: "Name")}

## Table.FromPartitions

Returns a table that is the result of combining a set of partitioned tables into new columns. The type of the column can optionally be specified, the default is any.

Syntax: Table.FromPartitions(partitionColumn as text, partitions as list, optional partitionColumnType as

Example: Table.FromPartitions( "Year", { { 1994, Table.FromPartitions( "Month", { { "Jan",

Table.FromPartitions( "Day",

Answer: { { 1, #table({"Foo"}, {"Bar"}) } }, { 2, #table({"Foo"}, {"Bar"}) } } }, { "Feb",

Table.FromPartitions(

## Table.FromRecords

Returns a table from a list of records.

Syntax: Table.FromRecords(records as list, optional columns as any, optional missingField as nullable

Example: Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name = "Jim", Phone =

Answer: "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"]})

Example: Table.ColumnsOfType(Table.FromRecords({[CustomerID=1, Name="Bob"]}, type

table[CustomerID=Number.Type,

Answer: Name=Text.Type]), {type number})

## Table.FromRows

Creates a table from the list where each element of the list is a list that contains the column values for a single row.

Syntax: Table.FromRows(rows as list, optional columns as any) as table

Example: Table.FromRows({ {1, "Bob", "123-4567"}, {2, "Jim", "987-6543"} }, {"CustomerID", "Name", "Phone"})

Answer: CUSTOMERID NAME PHONE

Example: text types.

Answer: Table.FromRows({ {1, "Bob", "123-4567"}, {2, "Jim", "987-6543"} }, type table [CustomerID = number, Name = text,

## Table.FromValue

Returns a table with a column containing the provided value or list of values.

Syntax: Table.FromValue(value as any, optional options as nullable record) as table

Example: Table.FromValue(1)

Example: Table.FromValue({1, "Bob", "123-4567"})

Example: Table.FromValue(1, [DefaultColumnName = "MyValue"])

## Table.FuzzyJoin

Joins the rows from the two tables that fuzzy match based on the given keys.

Syntax: `Table.FuzzyJoin(table1 as table, key1 as any, table2 as table, key2 as any, optional joinKind as`

## Table.FuzzyNestedJoin

Performs a fuzzy join between tables on supplied columns and produces the join result in a new column.

Syntax: `Table.FuzzyNestedJoin(table1 as table, key1 as any, table2 as table, key2 as any, newColumnName as`

## Table.Group

Groups table rows by the values of key columns for each row.

Syntax: `Table.Group(table as table, key as any, aggregatedColumns as list, optional groupKind as nullable`

Example: `Table.Group(Table.FromRecords([CustomerID= 1, price = 20], [CustomerID= 2, price = 10], [CustomerID= 2, price`

Answer: `= 20], [CustomerID= 1, price = 10], [CustomerID= 3, price = 20], [CustomerID= 3, price = 5])), "CustomerID",`

## Table.HasColumns

Returns true if a table has the specified column or columns.

Syntax: `Table.HasColumns(table as table, columns as any) as logical`

Example: `Table.HasColumns(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name`

Answer: `= "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =`

Example: `Table.HasColumns(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name`

Answer: `= "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =`

## Table.InsertRows

Returns a table with the list of rows inserted into the table at an index. Each row to insert must match the row type of the table..

Syntax: `Table.InsertRows(table as table, offset as number, rows as list) as table`

Example: `Table.InsertRows(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name`

Answer: `= "Jim", Phone = "987-6543"]]), 1, {[CustomerID = 3, Name = "Paul", Phone = "543-7890"]])`

Example: `Table.InsertRows(Table.FromRecords([CustomerID = 1, Name = "Bob", Phone = "123-4567"]]), 1, {[CustomerID = 2,`

Answer: `Name = "Jim", Phone = "987-6543"],[CustomerID = 3, Name = "Paul", Phone = "543-7890"] ])`

## Table.IsDistinct

Determines whether a table contains only distinct rows.

Syntax: `Table.IsDistinct(table as table, optional comparisonCriteria as any) as logical`

Example: `Table.IsDistinct(Table.FromRecords([ CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name`

Answer: `= "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 4, Name =`

Example: `Table.IsDistinct(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 5, Name =`

### Table.IsEmpty

Returns true if the table does not contain any rows.

Syntax: `Table.IsEmpty(table as table) as logical`

Example: `Table.IsEmpty(Table.FromRecords({[CustomerID =1, Name ="Bob", Phone = "123-4567"],[CustomerID =2, Name ="Jim",`

Answer: `Phone = "987-6543"],[CustomerID =3, Name ="Paul", Phone = "543-7890"]}))`

Example: `Table.IsEmpty(Table.FromRecords({}))`

Answer: TRUE

### Table.Join

Joins the rows of table1 with the rows of table2 based on the equality of the values of the key columns selected by table1, key1 and table2, key2.

Syntax: `Table.Join(table1 as table, key1 as any, table2 as table, key2 as any, optional joinKind as`

Example: `Table.Join`

Answer: `(Table.FromRecords({`

### Table.Keys

Returns a list of key column names from a table.

Syntax: `Table.Keys(table as table) as list`

### Table.Last

Returns the last row of a table.

Syntax: `Table.Last(table as table, optional default as any) as any`

Example: `Table.Last(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =`

Answer: `"Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"]}))`

Example: `Table.Last(Table.FromRecords({}), [a = 0, b = 0])`

Answer: A 0

### Table.LastN

Returns the last row(s) from a table, depending on the countOrCondition parameter.

Syntax: `Table.LastN(table as table, countOrCondition as any) as table`

Example: `Table.LastN(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =`

Answer: `"Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"]}), 2)`

Example: `Table.LastN(Table.FromRecords({[a = -1, b = -2], [a = 3, b = 4], [a = 5, b = 6]}), each _ [a] > 0)`

Answer: A B

### Table.MatchesAllRows

Returns true if all of the rows in a table meet a condition.

Syntax: `Table.MatchesAllRows(table as table, condition as function) as logical`

Example: `Table.MatchesAllRows(Table.FromRecords({[a = 2, b = 4], [a = 6, b = 8]}), each`

Number.Mod([a], 2) = 0 )

Example: `Table.MatchesAllRows(Table.FromRecords({[a = 1, b = 2], [a = -3, b = 4]}), each _ = [a = 1, b = 2])`

Answer: FALSE

## Table.MatchesAnyRows

Returns true if any of the rows in a table meet a condition.

Syntax: Table.MatchesAnyRows(table as table, condition as function) as logical

Example: Table.MatchesAnyRows(Table.FromRecords({[a = 1, b = 4], [a = 3, b = 8]}), each Number.Mod([a], 2) = 0 )

Answer: FALSE

Example: Table.MatchesAnyRows(Table.FromRecords({[a = 1, b = 2], [a = -3, b = 4]}), each \_ = [a = 1, b = 2])

Answer: TRUE

## Table.Max

Returns the largest row or rows from a table using a comparisonCriteria.

Syntax: Table.Max(table as table, comparisonCriteria as any, optional default as any) as any

Example: Table.Max(Table.FromRecords({[a = 2, b = 4], [a = 6, b = 8]}), "a")

Answer: A 6

Example: Table.Max(#table({"a"},{}), "a", -1)

Answer: -1

## Table.MaxN

Returns the largest N rows from a table. After the rows are sorted, the countOrCondition parameter must be specified to further filter the result.

Syntax: Table.MaxN(table as table, comparisonCriteria as any, countOrCondition as any) as table

Example: Table.MaxN(Table.FromRecords({[a = 2, b = 4], [a = 0, b = 0], [a = 6, b = 2]}), "a", each [a] > 0)

Answer: A B

Example: Table.MaxN(Table.FromRecords({[a = 2, b = 4], [a = 8, b = 0], [a = 6, b = 2]}), "a", each [b] > 0)

Answer: Table.Min

## Table.Min

Returns the smallest row or rows from a table using a comparisonCriteria.

Syntax: Table.Min(table as table, comparisonCriteria as any, optional default as any) as any

Example: Table.Min(Table.FromRecords({[a = 2, b = 4], [a = 6, b = 8]}), "a")

Answer: A 2

Example: Table.Min(#table({"a"},{}), "a", -1)

## Table.MinN

Returns the smallest N rows in the given table. After the rows are sorted, the countOrCondition parameter must be specified to further filter the result.

Syntax: Table.MinN(table as table, comparisonCriteria as any, countOrCondition as any) as table

Example: Table.MinN(Table.FromRecords({[a = 2, b = 4], [a = 0, b = 0], [a = 6, b = 4]}), "a", each [a] < 3)

Answer: A B

Example: Table.MinN(Table.FromRecords({[a = 2, b = 4], [a = 8, b = 0], [a = 6, b = 2]}), "a", each [b] < 0)

Answer: Table.NestedJoin

## Table.NestedJoin

Joins the rows of the tables based on the equality of the keys. The results are entered into a new column.



Syntax: `Table.NestedJoin(table1 as table, key1 as any, table2 as any, key2 as any, newColumnName as text,`

### Table.Partition

Partitions the table into a list of groups number of tables, based on the value of the column of each row and a hash function. The hash function is applied to the value of the column of a row to obtain a hash value for the row. The hash value modulo groups determines in which of the returned tables the row will be placed.

Syntax: `Table.Partition(table as table, column as text, groups as number, hash as function) as list`

### Table.PartitionValues

Returns information about how a table is partitioned.

Syntax: `Table.Partition(table as table, column as text, groups as number, hash as function) as list`

Example: using the value of the columns as the hash function.

Answer: `Table.Partition(Table.FromRecords([a = 2, b = 4], [a = 1, b = 4], [a = 2, b = 4], [a = 1, b = 4])), "a", 2,`

### Table.Pivot

Given a table and attribute column containing pivotValues, creates new columns for each of the pivot values and assigns them values from the valueColumn. An optional aggregationFunction can be provided to handle multiple occurrence of the same key value in the attribute column.

Syntax: `Table.Pivot(table as table, pivotValues as list, attributeColumn as text, valueColumn as text,`

Example: `= "a", value = 2 ], [ key = "y", attribute = "b", value = 4 ] }`

Answer: and pivot them into their own column.

Example: `= "c", value = 5 ], [ key = "y", attribute = "a", value = 2 ], [ key = "y", attribute = "b", value = 4 ] }`

Answer: and pivot them into their own column. The attribute "c" for key "x" has multiple values associated with it, so use the

### Table.PositionOf

Determines the position or positions of a row within a table.

Syntax: `Table.PositionOf(table as table, row as record, optional occurrence as any, optional`

Example: `([a = 2, b = 4], [a = 6, b = 8], [a = 2, b = 4], [a = 1, b = 4])`

Answer: `Table.PositionOf(Table.FromRecords([a = 2, b = 4], [a = 1, b = 4], [a = 2, b = 4], [a = 1, b = 4])), [a = 2,`

Example: `Table.PositionOf(Table.FromRecords([a = 2, b = 4], [a = 1, b = 4], [a = 2, b = 4], [a = 1, b = 4])), [a = 2,`

Answer: `b = 4], 1)`

Example: `([a = 2, b = 4], [a = 6, b = 8], [a = 2, b = 4], [a = 1, b = 4])`

Answer: `Table.PositionOf(Table.FromRecords([a = 2, b = 4], [a = 1, b = 4], [a = 2, b = 4], [a = 1, b = 4])), [a = 2,`

### Table.PositionOfAny

Determines the position or positions of any of the specified rows within the table.

Syntax: `Table.PositionOfAny(table as table, rows as list, optional occurrence as nullable number, optional`

Example: `Table.PositionOfAny(Table.FromRecords([a = 2, b = 4], [a = 1, b = 4], [a = 2, b = 4], [a = 1, b = 4])), {[a =`

Answer: `2, b = 4], [a = 6, b = 8])`

Example: `Table.PositionOfAny(Table.FromRecords([a = 2, b = 4], [a = 6, b = 8], [a = 2, b = 4], [a = 1, b = 4])), {[a =`

Answer: 2, b = 4], [a = 6, b = 8]], Occurrence.All)

### Table.PrefixColumns

Returns a table where the columns have all been prefixed with a text value.

Syntax: Table.PrefixColumns(table as table, prefix as text) as table

Example: Table.PrefixColumns(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}), "MyTable")

Answer: MYTABLE.CUSTOMERID MYTABLE.NAME MYTABLE.PHONE

### Table.Profile

Returns a profile of the columns of a table.

Syntax: Table.Profile(table as table, optional additionalAggregates as nullable list) as table

### Table.PromoteHeaders

Promotes the first row of the table into its header or column names.

Syntax: Table.PromoteHeaders(table as table, optional options as nullable record) as table

Example: Table.PromoteHeaders(Table.FromRecords({[Column1 = "CustomerID", Column2 = "Name", Column3 = #date(1980,1,1)],

Answer: [Column1 = 1, Column2 = "Bob", Column3 = #date(1980,1,1)]})

Example: Table.PromoteHeaders(Table.FromRecords({[Rank = 1, Name = "Name", Date = #date(1980,1,1)], [Rank = 1, Name =

Answer: "Bob", Date = #date(1980,1,1)]}), [PromoteAllScalars = true, Culture = "en-US"])

### Table.Range

Returns the specified number of rows from a table starting at an offset.

Syntax: Table.Range(table as table, offset as number, optional count as nullable number) as table

Example: Table.Range(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"],

[CustomerID = 4, Name =

Example: Table.Range(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"],

[CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"],

[CustomerID = 4, Name =

### Table.RemoveColumns

Returns a table without a specific column or columns.

Syntax: Table.RemoveColumns(table as table, columns as any, optional missingField as nullable number) as

Example: Table.RemoveColumns(Table.FromRecords({[CustomerID=1, Name="Bob", Phone = "123-4567"]}), "Phone")

Answer: CUSTOMERID NAME

Example: Table.RemoveColumns(Table.FromRecords({[CustomerID=1, Name="Bob", Phone = "123-4567"]}), "Address")

Answer: [Expression.Error] The field 'Address' of the record was not found.

### Table.RemoveFirstN

Returns a table with the specified number of rows removed from the table starting at the first row. The number of rows removed depends on the optional countOrCondition parameter.

Syntax: Table.RemoveFirstN(table as table, countOrCondition as any) as table

Example: `Table.RemoveFirstN(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Answer: Name = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name`  
 Example: `Table.RemoveFirstN(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Answer: Name = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name`  
 Example: `Table.RemoveFirstN(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Answer: Name = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 4,`

### Table.RemoveLastN

Returns a table with the specified number of rows removed from the table starting at the last row. The number of rows removed depends on the optional `countOrCondition` parameter.

Syntax: `Table.RemoveLastN(table as table, optional countOrCondition as any) as table`

Example: `Table.RemoveLastN(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]},[CustomerID = 2, Name Answer: = "Jim", Phone = "987-6543"],[CustomerID = 3, Name = "Paul", Phone = "543-7890"],[CustomerID = 4, Name =`  
 Example: `Table.RemoveLastN(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]},[CustomerID = 2, Name Answer: = "Jim", Phone = "987-6543"],[CustomerID = 3, Name = "Paul", Phone = "543-7890"],[CustomerID = 4, Name =`

### Table.RemoveMatchingRows

Removes all occurrences of rows from a table.

Syntax: `Table.RemoveMatchingRows(table as table, rows as list, optional equationCriteria as any) as table`

Example: `Table.RemoveMatchingRows(Table.FromRecords({[a = 1, b = 2], [a = 3, b = 4], [a = 1, b = 6]}), {[a = 1]}, "a")`  
 Answer: A B

### Table.RemoveRows

Returns a table with the specified number of rows removed from the table starting at an offset.

Syntax: `Table.RemoveRows(table as table, offset as number, optional count as nullable number) as table`

Example: `Table.RemoveRows(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Name Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =`  
 Example: `Table.RemoveRows(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Name Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =`  
 Example: `Table.RemoveRows(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Name Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =`

### Table.RemoveRowsWithErrors

Returns a table with all rows removed from the table that contain an error in at least one of the cells in a row.

Syntax: Table.RemoveRowsWithErrors(table as table, optional columns as nullable list) as table

Example: Table.RemoveRowsWithErrors(Table.FromRecords({[Column1=...],[Column1=2],[Column1=3]}))

### Table.RenameColumns

Returns a table with the columns renamed as specified.

Syntax: Table.RenameColumns(table as table, renames as list, optional missingField as nullable number) as

Example: Table.RenameColumns(Table.FromRecords({[CustomerNum=1, Name="Bob", Phone = "123-4567"]}), {"CustomerNum",

Answer: "CustomerID"})

Example: Table.RenameColumns(Table.FromRecords({[CustomerNum=1, Name="Bob", PhoneNum = "123-4567"]}), {"CustomerNum",

Answer: "CustomerID", {"PhoneNum", "Phone"})

Example: Table.RenameColumns(Table.FromRecords({[CustomerID=1, Name="Bob", Phone = "123-4567"]}), {"NewCol",

Answer: "NewColumn"}, MissingField.Ignore)

### Table.ReorderColumns

Returns a table with specific columns in an order relative to one another.

Syntax: Table.ReorderColumns(table as table, columnOrder as list, optional missingField as nullable

Example: Table.ReorderColumns(Table.FromRecords({[CustomerID=1, Phone = "123-4567", Name = "Bob"]}), {"Name", "Phone"})

Answer: CUSTOMERID NAME PHONE

Example: Table.ReorderColumns(Table.FromRecords({[CustomerID=1, Name = "Bob", Phone = "123-4567"]}), {"Phone",

Answer: "Address"}, MissingField.Ignore)

### Table.Repeat

Returns a table containing the rows of the table repeated the count number of times.

Syntax: Table.Repeat(table as table, count as number) as table

Example: Table.Repeat(Table.FromRecords({[a = 1, b = "hello"], [a = 3, b = "world"]}), 2)

Answer: A B

### Table.ReplaceErrorValues

Replaces the error values in the specified columns with the corresponding specified value.

Syntax: Table.ReplaceErrorValues(table as table, errorReplacement as list) as table

Example: Table.ReplaceErrorValues(Table.FromRows({[1,"hello"],[3,...]}, {"A","B"}), {"B", "world"})

Answer: A B

Example: Table.ReplaceErrorValues(Table.FromRows({[...], [1,2]}, {"A","B"}), {"A", "hello"}, {"B", "world"})

Answer: A B

### Table.ReplaceKeys

Returns a new table with new key information set in the keys argument.

Syntax: Table.ReplaceKeys(table as table, keys as list) as table

### Table.ReplaceMatchingRows

Replaces specific rows from a table with the new rows.

Syntax: Table.ReplaceMatchingRows(table as table, replacements as list, optional equationCriteria as any)

Example: Table.ReplaceMatchingRows(Table.FromRecords({[a = 1, b = 2], [a = 2, b = 3], [a = 3, b = 4], [a = 1, b = 2]}),{

Answer: {[a = 1, b = 2], [a = -1, b = -2]}, {[a = 2, b = 3], [a = -2, b = -3]} })

### Table.ReplaceRelationshipIdentity

0

Syntax: Table.ReplaceRelationshipIdentity(value as any, identity as text) as any

### Table.ReplaceRows

Returns a table where the rows beginning at an offset and continuing for count are replaced with the provided rows.

Syntax: Table.ReplaceRows(table as table, offset as number, count as number, rows as list) as table

Example: Table.ReplaceRows(Table.FromRecords({[Column1=1], [Column1=2], [Column1=3], [Column1=4], [Column1=5]}), 1, 3,

Answer: {[Column1=6], [Column1=7]})

### Table.ReplaceValue

Replaces oldValue with newValue in specific columns of a table, using the provided replacer function, such as text.Replace or Value.Replace.

Syntax: Table.ReplaceValue(table as table, oldValue as any, newValue as any, replacer as function,

Example: Table.ReplaceValue(Table.FromRecords({[a = 1, b = "hello"], [a = 3, b = "goodbye]}), "goodbye", "world",

Answer: Replacer.ReplaceText, {"b"})

Example: Table.ReplaceValue(Table.FromRecords({[a = 1, b = "hello"], [a = 3, b = "world]}), "ur", "or",

Answer: Replacer.ReplaceText, {"b"})

### Table.ReverseRows

Returns a table with the rows in reverse order.

Syntax: Table.ReverseRows(table as table) as table

Example: Table.ReverseRows(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name

Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =

### Table.RowCount

Returns the number of rows in a table.

Syntax: Table.RowCount(table as table) as number

Example: Table.RowCount(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name

Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"]})))

### Table.Schema

Returns a table containing a description of the columns (i.e. the schema) of the specified table.

Syntax: Table.Schema(table as table) as table

## Table.SelectColumns

Returns a table that contains only specific columns.

Syntax: Table.SelectColumns(table as table, columns as any, optional missingField as nullable number) as

Example: Table.SelectColumns(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2,

Answer: Name = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 4,

Example: Table.SelectColumns(Table.FromRecords({[CustomerID=1, Name="Bob", Phone = "123-4567"]}), {"CustomerID",

Answer: "Name"})

Example: Table.SelectColumns(Table.FromRecords({[CustomerID=1, Name="Bob", Phone = "123-4567"]}), "NewColumn")

Answer: [Expression.Error] The field 'NewColumn' of the record wasn't found.

Example: Table.SelectColumns(Table.FromRecords({[CustomerID=1, Name = "Bob", Phone = "123-4567" ]}), {"CustomerID",

Answer: "NewColumn"}, MissingField.UseNull)

## Table.SelectRows

Returns a table containing only the rows that match a condition.

Syntax: Table.SelectRows(table as table, condition as function) as table

Example: Table.SelectRows(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name

Answer: = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 4, Name =

Example: Table.SelectRows(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name

Answer: = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] , [CustomerID = 4, Name =

## Table.SelectRowsWithErrors

Returns a table with only the rows from table that contain an error in at least one of the cells in a row.

Syntax: Table.SelectRowsWithErrors(table as table, optional columns as nullable list) as table

Example: Table.SelectRowsWithErrors(Table.FromRecords({ [CustomerID =..., Name = "Bob", Phone = "123-4567"],

Answer: [CustomerID = 2, Name = "Jim", Phone = "987-6543"] , [CustomerID = 3, Name = "Paul", Phone = "543-7890"] ,

## Table.SingleRow

Returns a single row from a table.

Syntax: Table.SingleRow(table as table) as record

Example: Table.SingleRow(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}))

Answer: CUSTOMERID 1

## Table.Skip

Returns a table that does not contain the first row or rows of the table.

Syntax: Table.Skip(table as table, countOrCondition as any) as table

Example: Table.Skip(Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name =

Answer: "Jim", Phone = "987-6543" ], [CustomerID = 3, Name = "Paul", Phone = "543-7890" ],  
[CustomerID = 4, Name =  
Example: Table.Skip(Table.FromRecords({[CustomerID = 1, Name = "Bob", Phone = "123-4567"]}, [CustomerID = 2, Name =  
Answer: "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"],  
[CustomerID = 4, Name =  
Example: Table.Skip(Table.FromRecords({[OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0], [OrderID =  
Answer: 2, CustomerID = 1, Item = "1 lb. worms", Price = 5.0], [OrderID = 3, CustomerID = 2, Item = "Fishing net",

### Table.Sort

Sorts the rows in a table using a comparisonCriteria or a default ordering if one is not specified.

Syntax: Table.Sort(table as table, comparisonCriteria as any) as table

Example: Table.Sort(Table.FromRecords({[OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0], [OrderID =

Answer: 2, CustomerID = 1, Item = "1 lb. worms", Price = 5.0], [OrderID = 3, CustomerID = 2, Item = "Fishing net",

Example: Table.Sort(Table.FromRecords({[OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0], [OrderID =

Answer: 2, CustomerID = 1, Item = "1 lb. worms", Price = 5.0], [OrderID = 3, CustomerID = 2, Item = "Fishing net",

Example: Table.Sort(Table.FromRecords({[OrderID = 1, CustomerID = 1, Item = "Fishing rod", Price = 100.0], [OrderID =

Answer: 2, CustomerID = 1, Item = "1 lb. worms", Price = 5.0], [OrderID = 3, CustomerID = 2, Item = "Fishing net",

### Table.Split

Splits the specified table into a list of tables using the specified page size.

Syntax: Table.Split(table as table, pageSize as number) as list

Example: let Customers = Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name

Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =

### Table.SplitColumn

Returns a new set of columns from a single column applying a splitter function to each value.

Syntax: Table.SplitColumn(table as table, sourceColumn as text, splitter as function, optional

Example: let Customers = Table.FromRecords({ [CustomerID = 1, Name = "Bob", Phone = "123-4567"], [CustomerID = 2, Name

Answer: = "Jim", Phone = "987-6543"], [CustomerID = 3, Name = "Paul", Phone = "543-7890"], [CustomerID = 4, Name =

### Table.ToColumns

Returns a list of nested lists each representing a column of values in the input table.

Syntax: Table.ToColumns(table as table) as list

### Table.ToList

Returns a table into a list by applying the specified combining function to each row of values in a table.

Syntax: Table.ToList(table as table, optional combiner as nullable function) as list

Example: `Table.ToList(Table.FromRows({{Number.ToText(1),"Bob", "123-4567" },  
{Number.ToText(2), "Jim", "987-6543" },  
Answer: {Number.ToText(3), "Paul", "543-7890" })), Combiner.CombineTextByDelimiter(",")`

### Table.ToRecords

Returns a list of records from an input table.

Syntax: `Table.ToRecords(table as table) as list`

### Table.ToRows

Returns a nested list of row values from an input table.

Syntax: `Table.ToRows(table as table) as list`

### Table.TransformColumnNames

Transforms column names by using the given function.

Syntax: `Table.TransformColumnNames(table as table, nameGenerator as function, optional options as nullable`

Example: `Table.TransformColumnNames(Table.FromRecords({[#"Col#(tab)umn" = 1]}), Text.Clean)`

Answer: COLUMN

Example: `Table.TransformColumnNames(Table.FromRecords({[ColumnNum = 1, cColumnnum = 2, coLumnNUM = 3]}), Text.Clean,`

Answer: `[MaxLength = 6, Comparer = Comparer.OrdinalIgnoreCase])`

### Table.TransformColumns

Transforms columns from a table using a function.

Syntax: `Table.TransformColumns(table as table, transformOperations as list, optional defaultTransformation`

Example: `Table.TransformColumns(Table.FromRecords({[A="1", B=2], [A="5", B=10]}),{"A", Number.FromText})`

Answer: A B

Example: `Table.TransformColumns(Table.FromRecords({[A="1", B=2], [A="5", B=10]}), {"X", Number.FromText}, null,`

Answer: `MissingField.Ignore)`

Example: `Table.TransformColumns(Table.FromRecords({[A="1",B=2], [A="5", B=10]}), {"X", Number.FromText}, null,`

Answer: `MissingField.UseNull)`

Example: `Table.TransformColumns(Table.FromRecords({[A="1",B=2], [A="5", B=10]}), {"X", Number.FromText})`

Answer: `[Expression.Error] The column 'X' of the table wasn't found.`

### Table.TransformColumnTypes

Transforms the column types from a table using a type.

Syntax: `Table.TransformColumnTypes(table as table, typeTransformations as list, optional culture as`

Example: `Table.TransformColumnTypes(Table.FromRecords({[a = 1, b = 2], [a = 3, b = 4]}), {"a", type text}, "en-US")`

Answer: A B

### Table.TransformRows

Transforms the rows from a table using a transform function.

Syntax: `Table.TransformRows(table as table, transform as function) as list`

Example: `Table.TransformRows(Table.FromRecords({[a = 1], [a = 2], [a = 3], [a = 4], [a = 5]}), each [a])`

Answer: 1



Example: `Table.TransformRows(Table.FromRecords({[a = 1], [a = 2], [a = 3], [a = 4], [a = 5]}), (row) as record => [B = Number.ToText(row[a])])`

### Table.Transpose

Returns a table with columns converted to rows and rows converted to columns from the input table.

Syntax: `Table.Transpose(table as table, optional columns as any) as table`

Example: `Table.Transpose(Table.FromRecords({[Name = "Full Name", Value = "Fred"], [Name = "Age", Value = 42], [Name =`

`Answer: "Country", Value = "UK"]}))`

### Table.Unpivot

Given a list of table columns, transforms those columns into attribute-value pairs.

Syntax: `Table.Unpivot(table as table, pivotColumns as list, attributeColumn as text, valueColumn as text)`

Example: `([ key = "x", a = 1, b = null, c = 3 ], [ key = "y", a = 2, b = 4, c = null ])`

Answer: attribute-value pairs.

### Table.UnpivotOtherColumns

Translates all columns other than a specified set into attribute-value pairs, combined with the rest of the values in each row.

Syntax: `Table.UnpivotOtherColumns(table as table, pivotColumns as list, attributeColumn as text,`

Example: `Table.UnpivotOtherColumns(Table.FromRecords({ [ key = "key1", attribute1 = 1, attribute2 = 2, attribute3 = 3`

`Answer: ], [ key = "key2", attribute1 = 4, attribute2 = 5, attribute3 = 6 ] }, { "key" }, "column1", "column2")`

### Table.View

Creates or extends a table with user-defined handlers for query and action operations.

Syntax: `Table.View(table as nullable table, handlers as record) as table`

### Table.ViewFunction

Creates a function that can be intercepted by a handler defined on a view (via Table.View).

Syntax: `Table.ViewFunction(function as function) as function`

### Tables.GetRelationships

Returns the relationships among a set of tables.

Syntax: `Tables.GetRelationships(tables as table, optional dataColumn as nullable text) as table`

### Teradata.Database

Returns a table with data relating to the tables in the specified Teradata Database.

Syntax: `Teradata.Database(server as text, optional options as nullable record) as table`

### Text.AfterDelimiter

Returns the portion of text after the specified delimiter.

Syntax: `Text.AfterDelimiter(text as nullable text, delimiter as text, optional index as any) as any`

Example: `Text.AfterDelimiter("111-222-333", "-")`

Example: `Text.AfterDelimiter("111-222-333", "-", 1)`

Example: `Text.AfterDelimiter("111-222-333", "-", {1, RelativePosition.FromEnd})`

## Text.At

Returns a character starting at a zero-based offset.

Syntax: `Text.At(text as nullable text, index as number) as nullable text`

Example: `Text.At("Hello, World", 4)`

## Text.BeforeDelimiter

Returns the portion of text before the specified delimiter.

Syntax: `Text.BeforeDelimiter(text as nullable text, delimiter as text, optional index as any) as any`

Example: `Text.BeforeDelimiter("111-222-333", "-")`

Example: `Text.BeforeDelimiter("111-222-333", "-", 1)`

Example: `Text.BeforeDelimiter("111-222-333", "-", {1, RelativePosition.FromEnd})`

## Text.BetweenDelimiters

Returns the portion of text between the specified startDelimiter and endDelimiter.

Syntax: `Text.BetweenDelimiters(text as nullable text, startDelimiter as text, endDelimiter as text,`

Example: `Text.BetweenDelimiters("111 (222) 333 (444)", "(", ")")`

Answer: 222

Example: `Text.BetweenDelimiters("111 (222) 333 (444)", "(", ")", 1, 0)`

Answer: 444

Example: `Text.BetweenDelimiters("111 (222) 333 (444)", "(", ")", {1, RelativePosition.FromEnd}, {1,`

Answer: `RelativePosition.FromStart}`)

## Text.Clean

Returns the original text value with non-printable characters removed.

Syntax: `Text.Clean(text as nullable text) as nullable text`

Example: `Text.Clean("ABC#(lf)D")`

## Text.Combine

Returns a text value that is the result of joining all text values with each value separated by a separator.

Syntax: `Text.Combine(texts as list, optional separator as nullable text) as text`

Example: `Text.Combine({"Seattle", "WA"})`

Example: `Text.Combine({"Seattle", "WA"}, ", ")`

Answer: Seattle, WA

## Text.Contains

Returns true if a text value substring was found within a text value string

Example: otherwise, false.

Syntax: `Text.Contains(text as nullable text, substring as text, optional comparer as nullable function) as`

Example: `Text.Contains("Hello World", "Hello")`

Example: `Text.Contains("Hello World", "hello")`

## Text.End

Returns the number of characters from the end of a text value.

Syntax: `Text.End(text as nullable text, count as number) as nullable text`

Example: `Text.End("Hello, World", 5)`

## Text.EndsWith

Returns a logical value indicating whether a text value substring was found at the end of a string.

Syntax: `Text.EndsWith(text as nullable text, substring as text, optional comparer as nullable function) as`

Example: `Text.EndsWith("Hello, World", "world")`

Example: `Text.EndsWith("Hello, World", "World")`

## Text.Format

Syntax: `Text.Format(formatString as text, arguments as any, optional culture as nullable text) as text`

Example: `Text.Format("#{0}, #{1}, and #{2}.", { 17, 7, 22 })`

Answer: 17, 7, and 22.

Example: `Text.Format("The time for the #[distance] km run held in #[city] on #[date] was #[duration].", [city =`

`Answer: "Seattle", date = #date(2015, 3, 10), duration = #duration(0,0,54,40), distance = 10], "en-US")`

## Text.From

Returns the text representation of a number, date, time, datetime, datetimezone, logical, duration or binary value. If a value is null, `Text.From` returns null. The optional culture parameter is used to format the text value according to the given culture.

Syntax: `Text.From(value as any, optional culture as nullable text) as nullable text`

Example: `Text.From(3)`

## Text.FromBinary

Decodes data from a binary value in to a text value using an encoding.

Syntax: `Text.FromBinary(binary as nullable binary, optional encoding as nullable number) as nullable text`

## Text.InferNumberType

Infers granular number type (`Int64.Type`, `Double.Type`, etc.) of text using culture.

Syntax: `Text.InferNumberType(text as text, optional culture as nullable text) as type`

## Text.Insert

Returns a text value with `newValue` inserted into a text value starting at a zero-based offset.

Syntax: `Text.Insert(text as nullable text, offset as number, newText as text) as nullable text`

Example: `Text.Insert("ABD", 2, "C")`

## Text.Length

Returns the number of characters in a text value.

Syntax: `Text.Length(text as nullable text) as nullable number`

Example: `Text.Length("Hello World")`

## Text.Lower

Returns the lowercase of a text value.

Syntax: `Text.Lower(text as nullable text, optional culture as nullable text) as nullable text`

Example: `Text.Lower("AbCd")`

## Text.Middle

Returns the substring up to a specific length.

Syntax: `Text.Middle(text as nullable text, start as number, optional count as nullable number) as nullable`

Example: `Text.Middle("Hello World", 6, 5)`

Example: `Text.Middle("Hello World", 6, 20)`

### Text.NewGuid

Returns a Guid value as a text value.

Syntax: `Text.NewGuid()` as text

### Text.PadEnd

Returns a text value padded at the end with pad to make it at least length characters.

Syntax: `Text.PadEnd(text as nullable text, count as number, optional character as nullable text)` as

Example: `Text.PadEnd("Name", 10)`

Example: `Text.PadEnd("Name", 10, "|")`

### Text.PadStart

Returns a text value padded at the beginning with pad to make it at least length characters. If pad is not specified, whitespace is used as pad.

Syntax: `Text.PadStart(text as nullable text, count as number, optional character as nullable text)` as

Example: `Text.PadStart("Name", 10)`

Example: `Text.PadStart("Name", 10, "|")`

### Text.PositionOf

Returns the first occurrence of substring in a string and returns its position starting at startOffset.

Syntax: `Text.PositionOf(text as text, substring as text, optional occurrence as nullable number, optional`

Example: `Text.PositionOf("Hello, World! Hello, World!", "World")`

Example: `Text.PositionOf("Hello, World! Hello, World!", "World", Occurrence.Last)`

### Text.PositionOfAny

Returns the first occurrence of a text value in list and returns its position starting at startOffset.

Syntax: `Text.PositionOfAny(text as text, characters as list, optional occurrence as nullable number) as`

Example: `Text.PositionOfAny("Hello, World!", {"W"})`

Example: `Text.PositionOfAny("Hello, World!", {"H", "W"})`

### Text.Proper

Returns a text value with first letters of all words converted to uppercase.

Syntax: `Text.Proper(text as nullable text, optional culture as nullable text)` as nullable text

Example: `Text.Proper`

Answer: `Text.Proper("the QUICK BrOWn fOx jUmPs oVER tHe LAzy DoG")`

### Text.Range

Returns a number of characters from a text value starting at a zero-based offset and for count number of characters.

Syntax: `Text.Range(text as nullable text, offset as number, optional count as nullable number) as nullable`

Example: `Text.Range("Hello World", 6)`

Example: `Text.Range("Hello World Hello", 6, 5)`

### Text.Remove

Removes all occurrences of a character or list of characters from a text value. The removeChars parameter can be a character value or a list of character values.

Syntax: `Text.Remove(text as nullable text, removeChars as any) as nullable text`

Example: `Text.Remove("a,b;c",{",",";"})`

## Text.RemoveRange

Removes count characters at a zero-based offset from a text value.

Syntax: Text.RemoveRange(text as nullable text, offset as number, optional count as nullable number) as

Example: Text.RemoveRange("ABEFC", 2)

Example: Text.RemoveRange("ABEFC", 2, 2)

## Text.Repeat

Returns a text value composed of the input text value repeated a number of times.

Syntax: Text.Repeat(text as nullable text, count as number) as nullable text

Example: Text.Repeat("a", 5)

Example: Text.Repeat("helloworld.", 3)

Answer: helloworld.helloworld.helloworld.

## Text.Replace

Replaces all occurrences of a substring with a new text value.

Syntax: Text.Replace(text as nullable text, old as text, new as text) as nullable text

Example: Text.Replace("the quick brown fox jumps over the lazy dog", "the", "a")

Answer: a quick brown fox jumps over a lazy dog

## Text.ReplaceRange

Replaces length characters in a text value starting at a zero-based offset with the new text value.

Syntax: Text.ReplaceRange(text as nullable text, offset as number, count as number, newText as text) as

Example: Text.ReplaceRange("ABGF", 2, 1, "CDE")

## Text.Reverse

Reverses the provided text.

Syntax: Text.Reverse(text as nullable text) as nullable text

Example: Text.Reverse("123")

## Text.Select

Selects all occurrences of the given character or list of characters from the input text value.

Syntax: Text.Select(text as nullable text, selectChars as any) as nullable text

Example: Text.Select("a;b;c", {"a".. "z"})

## Text.Split

Returns a list containing parts of a text value that are delimited by a separator text value.

Syntax: Text.Split(text as text, separator as text) as list

Example: Text.Split("Name|Address|PhoneNumber", "|")

## Text.SplitAny

Returns a list containing parts of a text value that are delimited by any separator text values.

Syntax: Text.SplitAny(text as text, separators as text) as list

Example: Text.SplitAny("Jamie|Campbell|Admin|Adventure Works|www.adventure-works.com", "|")

## Text.Start

Returns the count of characters from the start of a text value.

Syntax: Text.Start(text as nullable text, count as number) as nullable text

Example: Text.Start("Hello, World", 5)

## Text.StartsWith

Returns a logical value indicating whether a text value substring was found at the beginning of a string.

Syntax: Text.StartsWith(text as nullable text, substring as text, optional comparer as nullable function)

Example: Text.StartsWith("Hello, World", "hello")

Example: Text.StartsWith("Hello, World", "Hello")

## Text.ToBinary

Encodes a text value into binary value using an encoding.

Syntax: Text.ToBinary(text as nullable text, optional encoding as nullable number, optional

## Text.ToList

Returns a list of characters from a text value.

Syntax: Text.ToList(text as text) as list

Example: Text.ToList("Hello World")

## Text.Trim

Removes any occurrences of characters in trimChars from text.

Syntax: Text.Trim(text as nullable text, optional trim as any) as nullable text

Example: Text.Trim(" a b c d ")

## Text.TrimEnd

Removes any occurrences of the characters specified in trimChars from the end of the original text value.

Syntax: Text.TrimEnd(text as nullable text, optional trim as any) as nullable text

Example: Text.TrimEnd(" a b c d ")

## Text.TrimStart

Removes any occurrences of the characters in trimChars from the start of the original text value.

Syntax: Text.TrimStart(text as nullable text, optional trim as any) as nullable text

Example: Text.TrimStart(" a b c d ")

## Text.Upper

Returns the uppercase of a text value.

Syntax: Text.Upper(text as nullable text, optional culture as nullable text) as nullable text

Example: Text.Upper("aBcD")

## TextEncoding.Ascii

Use to choose the ASCII binary form.

Value: 20127

## TextEncoding.BigEndianUnicode

Use to choose the UTF16 big endian binary form.

Value: 1201

## TextEncoding.Unicode

Use to choose the UTF16 little endian binary form.

Value: 1200

## TextEncoding.Utf16

Use to choose the UTF16 little endian binary form.

Value: 1200

## TextEncoding.Utf8

Use to choose the UTF8 binary form.

Value: 65001

## TextEncoding.Windows

Use to choose the Windows binary form.

Value: 1252

## Time.EndOfHour

Returns a DateTime value from the end of the hour.

Syntax: Time.EndOfHour(dateTime as any) as any

Example: Time.EndOfHour(#datetime(2011, 5, 14, 17, 0, 0))

Answer: #datetime(2011, 5, 14, 17, 59, 59.9999999)

Example: Time.EndOfHour(#datetimezone(2011, 5, 17, 5, 0, 0, -7, 0))

Answer: #datetimezone(2011, 5, 17, 5, 59, 59.9999999, -7, 0)

## Time.From

Returns a time value from a value.

Syntax: Time.From(value as any, optional culture as nullable text) as nullable time

Example: Time.From(0.7575)

Answer: #time(18,10,48)

Example: Time.From(#datetime(1899, 12, 30, 06, 45, 12))

Answer: #time(06, 45, 12)

## Time.FromText

Returns a Time value from a set of date formats.

Syntax: Time.FromText(text as nullable text, optional culture as nullable text) as nullable time

Example: Time.FromText("10:12:31am")

Answer: #time(10, 12, 31)

Example: Time.FromText("1012")

Answer: #time(10, 12, 00)

Example: Time.FromText("10")

Answer: #time(10, 00, 00)

## Time.Hour

Returns an hour value from a DateTime value.

Syntax: Time.Hour(dateTime as any) as nullable number

Example: Time.Hour(#datetime(2011, 12, 31, 9, 15, 36))

## Time.Minute

Returns a minute value from a DateTime value.

Syntax: Time.Minute(dateTime as any) as nullable number

Example: Time.Minute(#datetime(2011, 12, 31, 9, 15, 36))

## Time.Second

Returns a second value from a DateTime value

Syntax: Time.Second(dateTime as any) as nullable number`

Example: `Time.Second(#datetime(2011, 12, 31, 9, 15, 36.5))`

### Time.StartOfHour

Returns the first value of the hour from a time value.

Syntax: `Time.StartOfHour(dateTime as any) as any`

Example: `Time.StartOfHour(#datetime(2011, 10, 10, 8, 10, 32))`

Answer: `#datetime(2011, 10, 10, 8, 0, 0)`

### Time.ToRecord

Returns a record containing parts of a Date value.

Syntax: `Time.ToRecord(time as time) as record`

Example: `Time.ToRecord(#time(11, 56, 2))`

Answer: `HOUR 11`

### Time.ToText

Returns a text value from a Time value.

Syntax: `Time.ToText(time as nullable time, optional format as nullable text, optional culture as nullable)`

Example: `Time.ToText(#time(11, 56, 2))`

Answer: `0.497222222222222`

Example: `Time.ToText(#time(11, 56, 2), "hh:mm")`

Answer: `0.497222222222222`

### TraceLevel.Critical

Returns 1, the value for Critical trace level.

Value: 1

### TraceLevel.Error

Returns 2, the value for Error trace level.

Value: 2

### TraceLevel.Information

Returns 4, the value for Information trace level.

Value: 8

### TraceLevel.Verbose

Returns 5, the value for Verbose trace level.

Value: 16

### TraceLevel.Warning

Returns 3, the value for Warning trace level.

Value: 4

### Type.AddTableKey

Add a key to a table type.

Syntax: `Type.AddTableKey(table as type, columns as list, isPrimary as logical) as type`

### Type.ClosedRecord

The given type must be a record type returns a closed version of the given record type (or the same type, if it is already closed)

Syntax: `Type.ClosedRecord(type as type) as type`



Example: `Type.ClosedRecord(type [ A = number,...])`

Answer: `type [ A = number ]`

### Type.Facets

Returns the facets of a type.

Syntax: `Type.Facets(type as type) as record`

### Type.ForFunction

Creates a function type from the given .

Syntax: `Type.ForFunction(signature as record, min as number) as type`

Example: `Type.ForFunction([ReturnType = type number, Parameters = [X = type number]], 1)`

Answer: `type function (X as number) as number`

### Type.ForRecord

Returns a Record type from a fields record.

Syntax: `Type.ForRecord(fields as record, open as logical) as type`

### Type.FunctionParameters

Returns a record with field values set to the name of the parameters of a function type, and their values set to their corresponding types.

Syntax: `Type.FunctionParameters(type as type) as record`

### Type.FunctionRequiredParameters

Returns a number indicating the minimum number of parameters required to invoke the a type of function.

Syntax: `Type.FunctionRequiredParameters(type as type) as number`

Example: `Type.FunctionRequiredParameters(type function (x as number, optional y as text) as any)`

Answer: `1`

### Type.FunctionReturn

Returns a type returned by a function type.

Syntax: `Type.FunctionReturn(type as type) as type`

Example: `Type.FunctionReturn(type function () as any)`

Answer: `type any`

### Type.Is

Type.Is

Syntax: `Type.Is(type1 as type, type2 as type) as logical`

### Type.IsNullable

Returns true if a type is a nullable type

Example: otherwise, false.

Syntax: `Type.IsNullable(type as type) as logical`

Example: `Type.IsNullable(type number)`

Answer: `FALSE`

Example: `Type.IsNullable(type nullable number)`

Answer: `TRUE`

### Type.IsOpenRecord

Returns whether a record type is open.

Syntax: `Type.IsOpenRecord(type as type) as logical`

Example: `Type.IsOpenRecord(type [ A = number,...])`

Answer: TRUE

### Type.ListItem

Returns an item type from a list type.

Syntax: `Type.ListItem(type as type) as type`

Example: `Type.ListItem(type {number})`

Answer: type number

### Type.NonNullable

Returns the non nullable type from a type.

Syntax: `Type.NonNullable(type as type) as type`

Example: `Type.NonNullable(type nullable number)`

Answer: type number

### Type.OpenRecord

Returns an opened version of a record type, or the same type, if it is already open.

Syntax: `Type.OpenRecord(type as type) as type`

Example: `Type.OpenRecord(type [ A = number])`

Answer: type [ A = number, ... ]

### Type.RecordFields

Returns a record describing the fields of a record type with each field of the returned record type having a corresponding name and a value that is a record of the form [ Type = type, Optional = logical ].

Syntax: `Type.RecordFields(type as type) as record`

### Type.ReplaceFacets

Replaces the facets of a type.

Syntax: `Type.ReplaceFacets(type as type, facets as record) as type`

### Type.ReplaceTableKeys

Replaces the keys in a table type.

Syntax: `Type.ReplaceTableKeys(tableType as type, keys as list) as type`

### Type.TableColumn

Returns the type of a column in a table.

Syntax: `Type.TableColumn(tableType as type, column as text) as type`

### Type.TableKeys

Returns keys from a table type.

Syntax: `Type.TableKeys(tableType as type) as list`

### Type.TableRow

Returns a row type from a table type.

Syntax: `Type.TableRow(table as type) as type`

### Type.TableSchema

Returns a table containing a description of the columns (i.e. the schema) of the specified table type.

Syntax: `Type.TableSchema(tableType as type) as table`

## Type.Union

Returns the union of a list of types.

Syntax: `Type.Union(types as list) as type`

## Uri.BuildQueryString

Assemble a record into a URI query string.

Syntax: `Uri.BuildQueryString(query as record) as text`

## Uri.Combine

Returns a Uri based on the combination of the base and relative parts.

Syntax: `Uri.Combine(baseUri as text, relativeUri as text) as text`

## Uri.EscapeDataString

Encodes special characters in accordance with RFC 3986.

Syntax: `Uri.EscapeDataString(data as text) as text`

## Uri.Parts

Returns a record value with the fields set to the parts of a Uri text value.

Syntax: `Uri.Parts(absoluteUri as text) as record`

Example: `Uri.Parts("www.adventure-works.com")`

Answer: SCHEME http

Example: `let UriUnescapeDataString = (data as text) as text => Uri.Parts("http://contoso?a=" & data)[Query][a] in`

Answer: `UriUnescapeDataString("%2Bmoney%24")`

## Value.Add

Returns the sum of the two values.

Syntax: `Value.Add(value1 as any, value2 as any, optional precision as nullable number) as any`

## Value.As

`Value.As` is the function corresponding to the `as` operator in the formula language. The expression `value as type` asserts that the value of a value argument is compatible with type `as` per the `is` operator. If it is not compatible, an error is raised.

Syntax: `Value.As(value as any, type as type) as any`

## Value.Compare

Returns 1, 0, or -1 based on `value1` being greater than, equal to, or less than the `value2`. An optional comparer function can be provided.

Syntax: `Value.Compare(value1 as any, value2 as any, optional precision as nullable number) as number`

## Value.Divide

Returns the result of dividing the first value by the second.

Syntax: `Value.Divide(value1 as any, value2 as any, optional precision as nullable number) as any`

## Value.Equals

Returns whether two values are equal.

Syntax: `Value.Equals(value1 as any, value2 as any, optional precision as nullable number) as logical`

## Value.Firewall

`Value.Firewall`

Syntax: `Value.Firewall(key as text) as any`

### Value.FromText

Decodes a value from a textual representation, value, and interprets it as a value with an appropriate type. `Value.FromText` takes a text value and returns a number, a logical value, a null value, a `DateTime` value, a `Duration` value, or a text value. The empty text value is interpreted as a null value.

Syntax: `Value.FromText(text as any, optional culture as nullable text) as any`

### Value.Is

`Value.Is` is the function corresponding to the `is` operator in the formula language. The expression `value is type` returns true if the ascribed type of value is compatible with type, and returns false if the ascribed type of value is incompatible with type.

Syntax: `Value.Is(value as any, type as type) as logical`

### Value.Metadata

Returns a record containing the input's metadata.

Syntax: `Value.Metadata(value as any) as any`

### Value.Multiply

Returns the product of the two values.

Syntax: `Value.Multiply(value1 as any, value2 as any, optional precision as nullable number) as any`

### Value.NativeQuery

Evaluates a query against a target.

Syntax: `Value.NativeQuery(target as any, query as text, optional parameters as any, optional options as`

### Value.NullableEquals

Returns a logical value or null based on two values .

Syntax: `Value.NullableEquals(value1 as any, value2 as any, optional precision as nullable number) as`

### Value.RemoveMetadata

Removes the metadata on the value and returns the original value.

Syntax: `Value.RemoveMetadata(value as any, optional metaValue as any) as any`

### Value.ReplaceMetadata

Replaces the metadata on a value with the new metadata record provided and returns the original value with the new metadata attached.

Syntax: `Value.ReplaceMetadata(value as any, metaValue as any) as any`

### Value.ReplaceType

A value may be ascribed a type using `Value.ReplaceType`. `Value.ReplaceType` either returns a new value with the type ascribed or raises an error if the new type is incompatible with the value's native primitive type. In particular, the function raises an error when an attempt is made to ascribe an abstract type, such as `any`. When replacing a the type of a record, the new type must have the same number of fields, and the new fields replace the old fields by ordinal position, not by name. Similarly, when replacing the type of a table, the new type must have the same number of columns, and the new columns replace the old columns by ordinal position.

Syntax: `Value.ReplaceType(value as any, type as type) as any`

Value.ResourceExpression

Value.Subtract

Returns the difference of the two values.

Syntax: Value.Subtract(value1 as any, value2 as any, optional precision as nullable number) as any

Value.Type

Returns the type of the given value.

Syntax: Value.Type(value as any) as type

Variable.Value

Variable.Value

Syntax: Variable.Value(identifier as text) as any

Web.Contents

Returns the contents downloaded from a web url as a binary value.

Syntax: Web.Contents(url as text, optional options as nullable record) as binary

Web.Page

Returns the contents of an HTML webpage as a table.

Syntax: Web.Page(html as any) as table

WebAction.Request

Creates an action that, when executed, will return the results of performing a method request against url using HTTP as a binary value.

Syntax: WebAction.Request(method as text, url as text, optional options as nullable record) as action

WebMethod.Delete

Specifies the DELETE method for HTTP.

WebMethod.Get

Specifies the GET method for HTTP.

WebMethod.Head

Specifies the HEAD method for HTTP.

WebMethod.Patch

Specifies the PATCH method for HTTP.

WebMethod.Post

Specifies the POST method for HTTP.

WebMethod.Put

Specifies the PUT method for HTTP.

Xml.Document

Returns the contents of an XML document as a hierarchical table (list of records).

## Xml.Tables

Returns the contents of an XML document as a nested collection of flattened tables

Syntax: `Xml.Tables(contents as any, optional options as nullable record, optional encoding as nullable)`