

Azure Data Factory Expression language

function Cheat Sheet

Function Name	Description	Example	Result
Date Functions			
<u>addDays</u>	Add a number of days to a timestamp.	@addDays('2023-03-20T00:00:00Z', 2)	"2023-03-22T00:00:00Z"
<u>addHours</u>	Add a number of hours to a timestamp.	@addHours('2023-03-20T00:00:00Z', 3)	"2023-03-20T03:00:00Z"
<u>addMinutes</u>	Add a number of minutes to a timestamp.	@addMinutes('2023-03-20T00:00:00Z', 30)	"2023-03-20T00:30:00Z"
<u>addSeconds</u>	Add a number of seconds to a timestamp.	@addSeconds('2023-03-20T00:00:00Z', 45)	"2023-03-20T00:00:45Z"
<u>addToTime</u>	<u>Add a number of time units to a timestamp. See also getFutureTime.</u>	@addToTime('2023-03-20T00:00:00Z', 1, 'day')	"2023-03-21T00:00:00Z"
<u>convertFromUtc</u>	Convert a timestamp from Universal Time Coordinated (UTC) to the target time zone.	@convertFromUtc('2023-03-20T12:00:00Z', 'Pacific Standard Time')	"2023-03-20T05:00:00"
<u>convertTimeZone</u>	Convert a timestamp from the source time	@convertTimeZone('2023-03-20T12:00:00', 'UTC', 'Pacific Standard Time')	"2023-03-20T04:00:00"

	zone to the target time zone.		
convertToUtc	Convert a timestamp from the source time zone to Universal Time Coordinated (UTC).	@convertToUtc('2023-03-20T12:00:00', 'Pacific Standard Time')	"2023-03-20T19:00:00Z"
dayOfMonth	Return the day of the month component from a timestamp.	@dayOfMonth('2023-03-20T00:00:00Z')	20
dayOfWeek	Return the day of the week component from a timestamp.	@dayOfWeek('2023-03-20T00:00:00Z')	1 (Monday)
dayOfYear	Return the day of the year component from a timestamp.	@dayOfYear('2023-03-20T00:00:00Z')	79
formatDateTime	Return the timestamp as a string in optional format.	@formatDateTime('2023-03-20T12:00:00Z', 'yyyy-MM-dd')	"2023-03-20"
getFutureTime	Return the current timestamp plus the specified time units.	@getFutureTime(5, 'Day')	"2023-03-29T12:00:00Z" (assuming current UTC time is 2023-03-24T12:00:00Z)
	timestamp as a string.		(assuming the current UTC time)

	See also addToTime.		
getPastTime	Return the current timestamp minus the specified time units. See also subtract FromTime.	@getPastTime(5, 'Day')	"2023-03-19T12:00:00Z" (assuming current UTC time is 2023-03-24T12:00:00Z)
startOfDay	Return the start of the day for a timestamp.	@startOfDay('2023-03-20T12:00:00Z')	"2023-03-20T00:00:00Z"
startOfHour	Return the start of the hour for a timestamp.	@startOfHour('2023-03-20T12:34:56Z')	"
startOfMonth	Return the start of the month for a timestamp.	@startOfMonth('2023-03-20T00:00:00Z')	"2023-03-01T00:00:00Z"
subtractFromTime	Subtract a number of time units from a timestamp. See also getPastTime.	@subtractFromTime('2023-03-20T00:00:00Z', 1, 'day')	"2023-03-19T00:00:00Z"
ticks	Return the ticks property value for a specified timestamp.	@ticks('2023-03-20T00:00:00Z')	637841088000000000
utcNow	Return the current	@utcNow()	"2023-03-24T12:34:56.789Z"

String Functions			
<u>concat</u>	Combine two or more strings, and return the combined string.	@concat('Hello', ' ', 'World')	"Hello World"
<u>endsWith</u>	Check whether a string ends with the specified substring.	@endsWith('Hello World', 'World')	true
<u>guid</u>	Generate a globally unique identifier (GUID) as a string.	@guid()	"c5f5b5a5-5f5e-4f5d-5a5f-5b5c5d5e5f5g" (randomly generated GUID)
<u>indexOf</u>	Return the starting position for a substring.	@indexOf('Hello World', 'World')	6
<u>lastIndexOf</u>	Return the starting position for the last occurrence of a substring.	@lastIndexOf('Hello World World', 'World')	12
<u>replace</u>	Replace a substring with the specified string, and return the	@replace('Hello World', 'World', 'ADF')	"Hello ADF"

	updated string.		
<u>split</u>	Return an array that contains substrings, separated by commas, from a larger string based on a specified delimiter character in the original string.	@split('Hello,World', ',')	["Hello", "World"]
<u>startsWith</u>	Check whether a string starts with a specific substring.	@startsWith('Hello World', 'Hello')	true
<u>substring</u>	Return characters from a string, starting from the specified position.	@substring('Hello World', 0, 5)	"Hello"
<u>toLower</u>	Return a string in lowercase format.	@toLower('Hello World')	"hello world"
<u>toUpper</u>	Return a string in uppercase format.	@toUpper('Hello World')	"HELLO WORLD"
<u>trim</u>	Remove leading and trailing whitespace from a string,	@trim(' Hello World ')	"Hello World"

	and return the updated string.		
Collection Functions			
<u>contains</u>	Check whether a collection has a specific item.	@contains('Hello World', 'World')	true
<u>empty</u>	Check whether a collection is empty.	@empty("")	true
<u>first</u>	Return the first item from a collection.	@first(['Hello', 'World'])	"Hello"
<u>intersection</u>	Return a collection that has <i>only</i> the common items across the specified collections.	@intersection(['A', 'B', 'C'], ['B', 'C', 'D'])	["B", "C"]
<u>join</u>	Return a string that has <i>all</i> the items from an array, separated by the specified character.	@join(['Hello', 'World'], ',')	"Hello, World"
<u>last</u>	Return the last item from a collection.	@last(['Hello', 'World'])	"World"
<u>length</u>	Return the number of items in a	@length('Hello World')	11

	string or array.		
<u>skip</u>	Remove items from the front of a collection, and return <i>all the other</i> items.	@skip(['A', 'B', 'C', 'D'], 2)	["C", "D"]
<u>take</u>	Return items from the front of a collection.	@take(['A', 'B', 'C', 'D'], 2)	["A", "B"]
<u>union</u>	Return a collection that has <i>all</i> the items from the specified collections.	@union(['A', 'B', 'C'], ['B', 'C', 'D'])	["A", "B", "C", "D"]
Logical Function			
<u>and</u>	Check whether all expressions are true.	@and(true, false)	false
<u>equals</u>	Check whether both values are equivalent.	@equals(5, 5)	true
<u>greater</u>	Check whether the first value is greater than the second value.	@greater(5, 3)	true
<u>greaterOrEquals</u>	Check whether the first value is greater than or equal to	@greaterOrEquals(5, 5)	true

	the second value.		
if	Check whether an expression is true or false. Based on the result, return a specified value.	@if(true, 'True', 'False')	"True"
less	Check whether the first value is less than the second value.	@less(3, 5)	true
lessOrEquals	Check whether the first value is less than or equal to the second value.	@lessOrEquals(5, 5)	true
not	Check whether an expression is false.	@not(true)	false
or	Check whether at least one expression is true.	@or(true, false)	true
Conversion Functions			
array	Return an array from a single specified input. For multiple inputs,	@array(['Hello', 'World'])	["Hello", "World"]

	see createArray.		
base64	Return the base64-encoded version for a string.	@base64('Hello World')	"SGVsbG8gV29ybGQ="
base64ToBinary	Return the binary version for a base64-encoded string.	@base64ToBinary('SGVsbG8gV29ybGQ=')	Binary representation of "Hello World"
base64ToString	Return the string version for a base64-encoded string.	@base64ToString('SGVsbG8gV29ybGQ=')	"Hello World"
binary	Return the binary version for an input value.	@binary('Hello World')	Binary representation of "Hello World"
bool	Return the Boolean version for an input value.	@bool('true')	true
coalesce	Return the first non-null value from one or more parameters.	@coalesce(null, 'Hello', 'World')	"Hello"
createArray	Return an array from multiple inputs.	@createArray('Hello', 'World')	["Hello", "World"]
dataUri	Return the data URI for an input value.	@dataUri('text/plain', 'Hello World')	"data:text/plain;base64,SGVsbG8gV29ybGQ="

<u>dataUriToBinary</u>	Return the binary version for a data URI.	@dataUriToBinary('data:text/plain;base64,SGVsbG8gV29ybGQ=')	Binary representation of "Hello World"
<u>dataUriToString</u>	Return the string version for a data URI.	@dataUriToString('data:text/plain;base64,SGVsbG8gV29ybGQ=')	"Hello World"
<u>decodeBase64</u>	Return the string version for a base64- encoded string.	@decodeBase64('SGVsbG8gV29ybGQ=')	"Hello World"
<u>decodeDataUri</u>	Return the binary version for a data URI.	@decodeDataUri('data:text/plain;base64,SGVsbG8gV29ybGQ=')	"Hello World"
<u>decodeUriComponent</u>	Return a string that replaces escape characters with decoded versions.	@decodeUriComponent('Hello%20World')	"Hello World"
<u>encodeUriComponent</u>	Return a string that replaces URL-unsafe characters with escape characters.	@encodeUriComponent('Hello World')	"Hello%20World"
<u>float</u>	Return a floating point number for an input value.	@float('3.14')	3.14
<u>int</u>	Return the integer version for a string.	@int('5')	5

<u>json</u>	Return the JavaScript Object Notation (JSON) type value or object for a string or XML.	@json({'hello': 'world'})	{"hello": "world"}
<u>string</u>	Return the string version for an input value.	@string(42)	"42"
<u>uriComponent</u>	Return the URI-encoded version for an input value by replacing URL-unsafe characters with escape characters.	@uriComponent('Hello%20World')	"Hello%20World"
<u>uriComponentToBinary</u>	Return the binary version for a URI-encoded string.	@uriComponentToBinary('Hello%20 World')	Binary representation of "Hello World"
<u>uriComponentToString</u>	Return the string version for a URI-encoded string.	@uriComponentToString('Hello%20 World')	"Hello World"
<u>xml</u>	Return the XML version for a string.	@xml('<hello>world</hello>')	XML representation of "<hello>world</hello>"
<u>xpath</u>	Check XML for nodes or values that match an XPath (XML	@xpath('<hello>world</hello>', '/hello')	"world"

	Path Language) expression, and return the matching nodes or values.		
Math Functions			
<u>add</u>	Return the result from adding two numbers.	@add(3, 5)	8
<u>div</u>	Return the result from dividing two numbers.	@div(10, 2)	5
<u>max</u>	Return the highest value from a set of numbers or an array.	@max(3, 5)	5
<u>min</u>	Return the lowest value from a set of numbers or an array.	@min(3, 5)	3
<u>mod</u>	Return the remainder from dividing two numbers.	@mod(10, 3)	1
<u>mul</u>	Return the product from multiplying two numbers.	@mul(3, 5)	15
<u>rand</u>	Return a random integer from a specified range.	@rand(1, 10)	A random number between 1 and 10

<u>range</u>	Return an integer array that starts from a specified integer.	@range(1, 5)	[1, 2, 3, 4, 5]
<u>sub</u>	Return the result from subtracting the second number from the first number.	@sub(5, 3)	2