BASE64DECODE Function

Converts an input base64 value to text. Output type is String.

- base64 is a method of representing data in a binary format over text protocols. During encoding, text values are converted to binary values 0-63. Each value is stored as an ASCII character based on a conversion chart.
  - Typically, base64 is used to transmit binary information, such as images, over transfer methods that use text, such as HTTP.

    NOTE: base64 is not an effective method of encryption.

  - For more information on base64, see *https://en.wikipedia.org/wiki/Base64*.

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

Basic Usage

Column reference example:

```
base64decode(mySource)
```

Output: Decodes the base64 values from the `mySource` column into text.

String literal example:

```
base64decode(&apos;GVsbG8sIFdvcmxkLiA=&apos;)
```

Output: Decodes the input value to the following text: `Hello, World. `.

Syntax and Arguments

```
base64decode(column_string)
```

Argument	Required?	Data Type	Description
column_string	Y	string	Name of the column or string literal to be applied to the function

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

column_string

Name of the column or string constant to be converted.

- Missing string or column values generate missing string results.
- String constants must be quoted (`'Hello, World'`).
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	String literal or column reference	`myColumn`

Examples

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

Example - base64 encoding and decoding

This example demonstrates base64 encoding functions in Designer Cloud Powered by Trifacta Enterprise Edition.

- `BASE64ENCODE` - converts an input string to base64 encoding, with optional padding at the end. See *BASE64ENCODE Function*.
- `BASE64DECODE` - converts an input base64encoded-string back to ASCII text. See *BASE64DECODE Function*.

Source:

The following example contains three columns of different data types:

IntegerField	StringField	ssn
-2082863942	This is a test string.	987654321
2012994989	"Hello, world."	987654322
-1637187918	"Hello, world. Hello, world. Hello, world."	987654323
-1144194035	fyi	987654324
-971872543		987654325
353977583	This is a test string.	987-65-4321
-366583667	"Hello, world."	987-65-4322
-573117553	"Hello, world. Hello, world. Hello, world."	987-65-4323
2051041970	fyi	987-65-4324
522691086		987-65-4325

Transformation - encode:

You can use the following transformation to encode all of the columns in your dataset:

Transformation Name	`Edit column with formula`
Parameter: Columns	`*`
Parameter: Formula	`base64encode($col, true)`

Results - encode:

The transformed dataset now looks like the following. Note the padding (equals signs) at the end of some of the values. Padding is added by default.

IntegerField	StringField	ssn
LTIwODI4NjM5NDI=	VGhpcyBpcyBhIHRlc3Qgc3RyaW5nLg==	OTg3NjU0MzIx
MjAxMjk5NDk4OQ==	IkhlbGxvLCB3b3JsZC4i	OTg3NjU0MzIy
LTE2MzcxODc5MTg=	IkhlbGxvLCB3b3JsZC4gSGVsbG8sIHdvcmxkLiBIZWxsbywgd29ybGQuIg==	OTg3NjU0MzIz
LTExNDQxOTQwMzU=	Znlp	OTg3NjU0MzI0
LTk3MTg3MjU0Mw==		OTg3NjU0MzI1
MzUzOTc3NTgz	VGhpcyBpcyBhIHRlc3Qgc3RyaW5nLg==	OTg3LTY1LTQzMjE=
LTM2NjU4MzY2Nw==	IkhlbGxvLCB3b3JsZC4i	OTg3LTY1LTQzMjI=
LTU3MzExNzU1Mw==	IkhlbGxvLCB3b3JsZC4gSGVsbG8sIHdvcmxkLiBIZWxsbywgd29ybGQuIg==	OTg3LTY1LTQzMjM=
MjA1MTA0MTk3MA==	Znlp	OTg3LTY1LTQzMjQ=
NTIyNjkxMDg2		OTg3LTY1LTQzMjU=

Transformation - decode:

The following transformation can be used to decode all of the columns:

Transformation Name	`Edit column with formula`
Parameter: Columns	`*`
Parameter: Formula	`base64decode($col)`

Results - decode:

IntegerField	StringField	ssn
-2082863942	This is a test string.	987654321
2012994989	"Hello, world."	987654322
-1637187918	"Hello, world. Hello, world. Hello, world."	987654323
-1144194035	fyi	987654324
-971872543		987654325
353977583	This is a test string.	987-65-4321
-366583667	"Hello, world."	987-65-4322
-573117553	"Hello, world. Hello, world. Hello, world."	987-65-4323
2051041970	fyi	987-65-4324
522691086		987-65-4325