Mastering Tableau Functions

Date, Numeric, and String Functions - Zero to Hero Visual Guide

Mastering Tableau : A Zero to Hero Journey

Defintion: Converts a string or datetime value to a date (removes time if present).

Use Case: Use when you need to convert a string to a valid date.

Syntax: DATE('YYYY-MM-DD')

Output: Date

Examples :	Output :
1. DATE('2024-03-25 14:30:00')	2024-03-25
2. DATE('2025-01-01')	2025-01-01
3. DATE('2025-06-12')	2025-06-12

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Ensures the input is treated as a date type in Tableau.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- (●) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

11/7/1996

Date 1

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Defintion: Adds or subtracts a specified interval (positive or negative) to a date.

Use Case: Use to calculate future or past dates based on an interval.

Syntax: DATEADD('date_part', interval, date)

Output: Date

Examples :

Output :

1. DATEADD('day', -5, #2024-03-25#)	2024-03-20
2. DATEADD('month', 1, #2024-03-25#)	2024-04-25
3. DATEADD('day',-5 ,#2025-06-12#)	2025-06-07

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Modifies a given date by adding a number of days, months, or years.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- (●) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

11/7/1996

Date 1

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Defintion: Returns the difference between two dates.

Use Case: Use to measure elapsed time between two dates.

Syntax: DATEDIFF('date_part', start_date, end_date)

Output: Integer

Examples :	Output :
1. DATEDIFF('day', #2024-03-20#, #2024-03-25#)	5
2. DATEDIFF('year', #2024-01-01#, #2025-01-01#)	1
3. DATEDIFF('year',#1996-11-07# ,#2025-06-12#)	29

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Calculates the number of days, months, or years between two dates.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- (●) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

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Date 1

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Defintion: Returns the full name of a date part.

Use Case: Use to get month or day names for reports.

Syntax: DATENAME('date_part', date)

Output: String

Examples :	Output :
1. DATENAME('month', #2024-03-25#)	March
2. DATENAME('weekday', #2024-03-25#)	Monday
3. DATENAME('day',#2025-06-12#)	12

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Converts numerical date parts into readable text (e.g., 'March' instead of '3').

Type
- (●) Date
- ( ) Numeric
- ( ) String

Function
- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- (●) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel
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Date 2
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Date 1
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Defintion: Converts a string into a date using a specified format.

Use Case: Use when dealing with custom date formats.

Syntax: DATEPARSE('format', string)

Output: Date

Examples :	Output :
1. DATEPARSE('yyyy-MM-dd', '2024-03-25')	2024-03-25
2. DATEPARSE('MM/dd/yyyy', '03/25/2024')	2024-03-25
3. DATEPARSE('DD/MM/YYYY',02/07/1997)	1997-01-02 00:00:00

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Converts text-based dates into real date values in Tableau.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- (●) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

11/7/1996

Date 1

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Defintion: **Extracts a specific date component.**

Use Case: **Use to break down dates into year, month, or day.**

Syntax: DATEPART('date_part', date)

Output: **Integer**

Examples :

Output :

1. DATEPART('month', #2024-03-25#)	3
2. DATEPART('weekday', #2024-03-25#)	2 (Monday)
3. DATEPART('day','2025-06-12')	12

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: **Similar to DATENAME, but returns numeric values instead of text.**

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- (●) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

11/7/1996

Date 1

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Defintion: Rounds a date down to the start of a specified period.

Use Case: Use when analyzing monthly, weekly, or yearly trends.

Syntax: DATETRUNC('date_part', date)

Output: Date

Examples :	Output :
1. DATETRUNC('month', #2024-03-25#)	2024-03-01
2. DATETRUNC('year', #2025-01-01#)	2025-01-01
3. DATETRUNC('month',#2025-06-12#)	2025-06-01

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Truncates a date to the beginning of a month, year, or week.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- (●) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

11/7/1996

Date 1

6/12/2025

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Defintion: Extracts the day of the month from a date.

Use Case: Use to filter or categorize by day.

Syntax: DAY(date)

Output: Integer

Examples :	Output :
1. DAY(#2024-03-25#)	25
2. DAY(#2025-01-01#)	1
3. DAY(#2025-06-12#)	12

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Helps analyze daily trends.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- (●) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

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Date 1

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Defintion: Checks if an expression is a valid date.

Use Case: Use to validate whether a value is a date.

Syntax: ISDATE(expression)

Output: Boolean

Examples :	Output :
1. ISDATE('2024-03-25')	TRUE
2. ISDATE('invalid-date')	FALSE
3. ISDATE('02/07/1997')	true

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Useful when working with string-based dates.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- (●) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

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Date 1

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Defintion: Creates a date from separate year, month, and day values.

Use Case: Use when dates are stored in separate fields.

Syntax: MAKEDATE(year, month, day)

Output: Date

Examples :	Output :
1. MAKEDATE(2024, 3, 25)	2024-03-25
2. MAKEDATE(2025, 1, 1)	2025-01-01
3. MAKEDATE(2020,02,02)	2020-02-02

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Converts individual year, month, day into a full date.(only accepts numeric inputs)

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- (●) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

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Date 1

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Defintion: Extracts the month number (1-12) from a date.

Use Case: Use to filter or group data by month.

Syntax: MONTH(date)

Output: Integer

Examples :	Output :
1. MONTH(#2024-03-25#)	3
2. MONTH(#2025-07-01#)	7
3. MONTH(#2025-06-12#)	6

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Helps in monthly trend analysis.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- (●) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

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Date 1

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Defintion: Returns the current date and time.

Use Case: Use when you need the current timestamp.

Syntax: NOW()

Output: Date & Time (Datetime)

Examples :	Output :
1. NOW()	2025-06-12 13:08:56.748974
2. NOW()	2025-06-12 13:08:56.74728
3. NOW()	2025-06-12 13:08:56.74966

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Useful for real-time data processing.

Type
- (●) Date
- ( ) Numeric
- ( ) String

Function
- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- (●) NOW
- ( ) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel
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Date 2
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Date 1
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Defintion: Returns the current date without time.

Use Case: Use when you need the current date.

Syntax: TODAY()

Output: Date

Examples :

Output :

1. TODAY()	2025-06-12
2. TODAY()	2025-06-12
3. TODAY()	2025-06-12

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Useful for daily reports and filtering.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- (●) TODAY
- ( ) WEEK
- ( ) YEAR

Intervel

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Date 2

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Date 1

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Defintion: Returns the week number of the year for a date.

Use Case: Use to categorize data by week.

Syntax: WEEK(date)

Output: Integer

Examples :	Output :
1. WEEK(#2024-03-25#)	13
2. WEEK(#2025-01-01#)	1
3. WEEK(#2025-06-12#)	24

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Helps track weekly trends.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- (●) WEEK
- ( ) YEAR

Intervel

-5

Date 2

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Date 1

6/12/2025

Mastering Tableau : A Zero to Hero Journey

Defintion: Extracts the year from a date.

Use Case: Use to filter or categorize by year.

Syntax: YEAR(date)

Output: Integer

Examples :	Output :
1. YEAR(#2024-03-25#)	2024
2. YEAR(#2025-01-01#)	2025
3. YEAR(#2025-06-12#)	2025

--Example : 3 is interactive with Date 1,Date 2 and Intervel for date functions.

Explanation: Useful for yearly trends and reports.

Type

- (●) Date
- ( ) Numeric
- ( ) String

Function

- ( ) DATE
- ( ) DATEADD
- ( ) DATEDIFF
- ( ) DATENAME
- ( ) DATEPARSE
- ( ) DATEPART
- ( ) DATETRUNC
- ( ) DAY
- ( ) ISDATE
- ( ) MAKEDATE
- ( ) MONTH
- ( ) NOW
- ( ) TODAY
- ( ) WEEK
- (●) YEAR

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Returns the absolute (positive) value.

Use Case: Remove negatives.

Syntax: ABS(number)

Output: Integer/Float (depends on input)

Examples :	Output :
1. ABS(-10)	10
2. ABS(5)	5
3. ABS(0)	0

Explanation: Makes all values non-negative.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ◉ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

-5

Date 2

11/7/1996

Date 1

6/12/2025

Mastering Tableau : A Zero to Hero Journey

Defintion: Rounds number up to nearest integer.

Use Case: Round up to avoid cutoffs.

Syntax: CEILING(number)

Output: Integer

Examples :	Output :
1. CEILING(4.3)	5
2. CEILING(7.8)	8
3. CEILING(-2.1)	-2

Explanation: Always rounds toward positive ∞.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ◉ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Converts radians to degrees.

Use Case: Readable angles.

Syntax: DEGREES(radians)

Output: Float

Examples :	Output :
1. DEGREES(3.14159)	180
2. DEGREES(1.5708)	90
3. DEGREES(0)	0

Explanation: Reverse of RADIANS.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ◉ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

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Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: e to the power of number.

Use Case: Exponential growth models.

Syntax: EXP(number)

Output: Float

Examples :	Output :
1. EXP(1)	2.718
2. EXP(0)	1
3. EXP(2)	7.389

Explanation: Inverse of LOG.

Type

- Date
- Numeric
- String

Function

- ABS
- CEILING
- DEGREES
- EXP
- FLOOR
- IFNULL
- INT
- ISNULL
- LOG
- LOG10
- MOD
- PI
- POWER
- RADIANS
- ROUND
- SQRT
- ZN

Intervel

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Date 2

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Date 1

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Defintion: Rounds down to nearest integer.

Use Case: Get lower bound.

Syntax: FLOOR(number)

Output: Integer

Examples :	Output :
1. FLOOR(4.8)	4
2. FLOOR(7.1)	7
3. FLOOR(-2.9)	-3

Explanation: Always rounds toward negative ∞.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ◉ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

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Date 2

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Date 1

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Defintion: Returns second value if first is null.

Use Case: Fallback/default values.

Syntax: IFNULL(expr1, expr2)

Output: Same as Input Type (Any Type)

Examples :	Output :
1. IFNULL(NULL, 10)	10
2. IFNULL(5, 0)	5
3. IFNULL(NULL, 0)	0

Explanation: Similar to COALESCE in SQL.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ◉ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

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Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Removes decimals (truncates).

Use Case: Convert to whole numbers.

Syntax: INT(number)

Output: Integer

Examples :	Output :
1. INT(4.9)	4
2. INT(-3.2)	-3
3. INT(7.0)	7

Explanation: Rounds toward 0.

Type

- Date
- Numeric
- String

Function

- ABS
- CEILING
- DEGREES
- EXP
- FLOOR
- IFNULL
- INT
- ISNULL
- LOG
- LOG10
- MOD
- PI
- POWER
- RADIANS
- ROUND
- SQRT
- ZN

Intervel

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Date 2

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Date 1

6/12/2025

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Defintion: Checks if value is NULL.

Use Case: Clean/check missing data.

Syntax: ISNULL(expression)

Output: Boolean

Examples :	Output :
1. ISNULL(NULL)	TRUE
2. ISNULL(5)	FALSE
3. ISNULL("")	FALSE

Explanation: Works for all types.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ◉ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

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Date 2

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Date 1

6/12/2025

Mastering Tableau : A Zero to Hero Journey

Defintion: Natural logarithm.

Use Case: Used in data scaling, ML.

Syntax: LOG(number)

Output: Float

Examples :	Output :
1. LOG(10)	1
2. LOG(100)	2
3. LOG(1)	0

Explanation: Default base is e.

Type

- Date
- Numeric
- String

Function

- ABS
- CEILING
- DEGREES
- EXP
- FLOOR
- IFNULL
- INT
- ISNULL
- LOG
- LOG10
- MOD
- PI
- POWER
- RADIANS
- ROUND
- SQRT
- ZN

Intervel

-5

Date 2

11/7/1996

Date 1

6/12/2025

Mastering Tableau : A Zero to Hero Journey

Defintion: Log base 10.

Use Case: Better for decimal-based logs.

Syntax: LOG10(number)

Output: Float

Examples :	Output :
1. LOG10(100)	2
2. LOG10(1000)	3
3. LOG10(1)	0

Explanation: Common in science/data.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ◉ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

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Date 2

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Date 1

6/12/2025

Mastering Tableau : A Zero to Hero Journey

Defintion: Remainder after division.

Use Case: Check even/odd, cycle, etc.

Syntax: MOD(dividend, divisor)

Output: Integer

Examples :	Output :
1. MOD(10, 3)	1
2. MOD(7, 2)	1
3. MOD(9, 5)	4

Explanation: Helps with pattern checks.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ◉ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

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Date 2

11/7/1996

Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Returns value of π (pi).

Use Case: Geometry, circles, radians.

Syntax: PI()

Output: Float

Examples :

Output :

1. PI()	3.14159
2.	
3.	

Explanation: No input needed.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ◉ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

-5

Date 2

11/7/1996

Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Exponentiation (x^y).

Use Case: Used in scaling or scoring.

Syntax: POWER(base, exponent)

Output: Float

Examples :	Output :
1. POWER(2, 3)	8
2. POWER(5, 2)	25
3. POWER(10, 0)	1

Explanation: Same as ^ in other tools.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ◉ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Converts degrees to radians.

Use Case: Used in trig calculations.

Syntax: RADIANS(degree)

Output: Float

Examples :	Output :
1. RADIANS(180)	3.14159
2. RADIANS(90)	1.5708
3. RADIANS(360)	6.2832

Explanation: Useful for angle conversions.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ◉ RADIANS
- ○ ROUND
- ○ SQRT
- ○ ZN

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Rounds number to given decimals.

Use Case: Format or clean values.

Syntax: ROUND(number, decimals)

Output: Integer/Float (depends on input)

Examples :	Output :
1. ROUND(4.567, 2)	4.57
2. ROUND(7.12345, 3)	7.123
3. ROUND(2.555, 2)	2.56

Explanation: Can round to 0 if decimals not given.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ◉ ROUND
- ○ SQRT
- ○ ZN

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Square root of number.

Use Case: Statistical formulas, geometry.

Syntax: SQRT(number)

Output: Float

Examples :	Output :
1. SQRT(25)	5
2. SQRT(16)	4
3. SQRT(0)	0

Explanation: Only valid for positive numbers.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ◉ SQRT
- ○ ZN

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Converts NULL to zero.

Use Case: Fill missing numeric values.

Syntax: ZN(number)

Output: Same as Input Type (Integer or Float)

Examples :	Output :
1. ZN(NULL)	0
2. ZN(10)	10
3. ZN(-5)	-5

Explanation: Prevents aggregation errors.

Type

- ○ Date
- ◉ Numeric
- ○ String

Function

- ○ ABS
- ○ CEILING
- ○ DEGREES
- ○ EXP
- ○ FLOOR
- ○ IFNULL
- ○ INT
- ○ ISNULL
- ○ LOG
- ○ LOG10
- ○ MOD
- ○ PI
- ○ POWER
- ○ RADIANS
- ○ ROUND
- ○ SQRT
- ◉ ZN

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Returns the ASCII code of the first character.

Use Case: Use for encoding or comparison logic.

Syntax: ASCII(string)

Output: Integer

Examples :	Output :
1. ASCII("A")	65
2. ASCII("a")	97
3. ASCII("!")	33

Explanation: Helps when working with character sets or special rules.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ◉ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

11/7/1996

Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Returns the character for a given ASCII code.

Use Case: Use for reverse ASCII lookup.

Syntax: CHAR(number)

Output: String

Examples :	Output :
1. CHAR(65)	A
2. CHAR(97)	a
3. CHAR(33)	!

Explanation: Converts numeric codes to characters.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ◉ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: **Returns TRUE if the substring is found within the string.**

Use Case: **Use to filter or highlight based on partial matches.**

Syntax: CONTAINS(string, substring)

Output: **Boolean**

Examples :	Output :
1. CONTAINS("Ramu", "a")	TRUE
2. CONTAINS("Tableau", "z")	FALSE
3. CONTAINS("Srinu", "rin")	TRUE

Explanation: **Useful in IF conditions to find patterns.**

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ◉ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Returns the position of the first occurrence.

Use Case: Use to locate text patterns.

Syntax: FIND(substring, string)

Output: Integer

Examples :	Output :
1. FIND("a", "Ramu")	2
2. FIND("I", "Tableau")	4
3. FIND("u", "srinu")	5

Explanation: Useful for conditional logic and parsing.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ◉ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Checks whether a value is null.

Use Case: Use to handle missing or empty string values.

Syntax: ISNULL(field)

Output: Boolean

Examples :	Output :
1. ISNULL("")	TRUE
2. ISNULL("Ramu")	FALSE
3. ISNULL(NULL)	TRUE

Explanation: Useful in cleaning or replacing blanks.

Type

- Date
- Numeric
- String

Function

- ASCII
- CHAR
- CONTAINS
- FIND
- ISNULL
- LEFT
- LEN
- LOWER
- MID
- REPLACE
- RIGHT
- SPLIT
- TRIM
- UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Extracts the leftmost n characters.

Use Case: Use to isolate part of a string from the start.

Syntax: LEFT(string, n)

Output: String

Examples :	Output :
1. LEFT("Tableau", 3)	Tab
2. LEFT("Ramu", 2)	Ra
3. LEFT("Srinu", 1)	S

Explanation: Good for fixed-length prefixes or codes.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ◉ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Returns the number of characters in a string.

Use Case: Use to validate or filter string lengths.

Syntax: LEN(string)

Output: Integer

Examples :	Output :
1. LEN("Ramu")	4
2. LEN("Srinu")	5
3. LEN("Tableau")	7

Explanation: Useful for length-based logic or text trimming.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ◉ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Converts all characters to lowercase.

Use Case: Helpful in case-insensitive comparisons.

Syntax: LOWER(string)

Output: String

Examples :	Output :
1. LOWER("RAMU")	ramu
2. LOWER("Data")	data
3. LOWER("SRINU")	srinu

Explanation: Makes text uniform in lowercase.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ◉ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Extracts characters from a specific position.

Use Case: Use to slice out parts of a string.

Syntax: MID(string, start, length)

Output: String

Examples :	Output :
1. MID("Tableau", 2, 3)	abl
2. MID("Ramu", 1, 2)	Ra
3. MID("Srinu", 3, 2)	in

Explanation: Great for substring extraction from anywhere.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ◉ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Mastering Tableau : A Zero to Hero Journey

Defintion: Replaces part of a string with another string.

Use Case: Use to correct values or format strings.

Syntax: REPLACE(string, substring, replacement)

Output: String

Examples :	Output :
1. REPLACE("Ramu", "a", "o")	Romu
2. REPLACE("Srinu", "u", "a")	Srina
3. REPLACE("Tableau", "leau", "lix")	Tablix

Explanation: Helps clean or transform textual values.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ◉ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Extracts the rightmost n characters.

Use Case: Use to get endings like suffixes or codes.

Syntax: RIGHT(string, n)

Output: String

Examples :	Output :
1. RIGHT("Tableau", 4)	leau
2. RIGHT("Ramu", 2)	mu
3. RIGHT("Srinu", 3)	inu

Explanation: Ideal for extracting fixed-end segments.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ◉ RIGHT
- ○ SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Splits a string by a delimiter and returns a part by position.

Use Case: Use to break apart compound strings.

Syntax: SPLIT(string, delimiter, token_number)

Output: String

Examples :	Output :
1. SPLIT("ramu_srinu", "_", 1)	ramu
2. SPLIT("hello-world", "-", 2)	world
3. SPLIT("a,b,c", ",", 3)	c

Explanation: Great for processing structured text (like emails, codes).

Type

- ○ Date
- ○ Numeric
- ● String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ● SPLIT
- ○ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Removes leading and trailing spaces.

Use Case: Use to clean up messy text data.

Syntax: TRIM(string)

Output: String

Examples :	Output :
1. TRIM(" Ramu ")	Ramu
2. TRIM(" Tableau ")	Tableau
3. TRIM(" Srinu")	Srinu

Explanation: Helps remove unwanted spaces from fields.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ◉ TRIM
- ○ UPPER

Intervel

-5

Date 2

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Date 1

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Mastering Tableau : A Zero to Hero Journey

Defintion: Converts all characters to uppercase.

Use Case: Use to standardize text for matching or formatting.

Syntax: UPPER(string)

Output: String

Examples :

Output :

1. UPPER("ramu")	RAMU
2. UPPER("Data")	DATA
3. UPPER("srinu")	SRINU

Explanation: Makes text case-consistent, especially useful before comparisons.

Type

- ○ Date
- ○ Numeric
- ◉ String

Function

- ○ ASCII
- ○ CHAR
- ○ CONTAINS
- ○ FIND
- ○ ISNULL
- ○ LEFT
- ○ LEN
- ○ LOWER
- ○ MID
- ○ REPLACE
- ○ RIGHT
- ○ SPLIT
- ○ TRIM
- ◉ UPPER

Intervel

-5

Date 2

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Date 1

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