

MySQL Data Types

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Numeric

BIT (n) Bit-value type. Parameter "n" indicates the number of bits per

value, from 1 to 64. Default 1.

TINYINT (n) A very small integer. Can be signed or unsigned. [UNSIGNED]

Signed: -128 to 127, Unsigned: 0 to 255.

A small integer. Can be signed or unsigned. SMALLINT (n)

[UNSIGNED] Signed: -32,768 to 32,767, Unsigned: 0 to 65,535

MEDIUMINT (n) A medium-sized integer. Can be signed or unsigned. [UNSIGNED] Signed: -8,388,608 to 8,388,607,Unsigned: 0 to 16,777,215

INT (n) A normal-sized integer. Can be signed or unsigned. [UNSIGNED] Signed: -2,147,483,648 to 2,147,483,647,Unsigned: 0 to

4,294,967,295

INTEGER (n) A synonym for INT. Can be signed or unsigned.

Signed: -2,147,483,648 to 2,147,483,647, Unsigned: 0 to [UNSIGNED]

4,294,967,295

BIGINT (n) A large integer. Can be signed or unsigned.

[UNSIGNED] Signed: -9,223,372,036,854,775,808 to

9,223,372,036,854,775,807

Unsigned: 0 to 18,446,744,073,709,551,615

DECIMAL (n [, d]) A number with decimal places. Parameter "n" is the precision or [UNSIGNED]

number of digits, and "d" is the number of digits after the decimal point (the scale). Maximum for n is 65 and maximum for d is 30.

(Note the UNSIGNED parameter is deprecated)

DEC (n [,d]) Synonym for DECIMAL

NUMERIC (n [,d]) Synonym for DECIMAL

FIXED (n [,d]) Synonym for DECIMAL

FLOAT (n [,d]) A small single-precision floating-point number. Uses

parameters of "n" for number of digits and "d" for number of

digits after the decimal place. Note: the parameters of

FLOAT are deprecated as of v8.0.17

Range: -3.402823466E+38 to -1.175494351E-38, 0, and

1.175494351E-38 to 3.402823466E+38

DOUBLE (n [,d]) A normal-sized double-precision floating-point number. Uses

> parameters of "n" for number of digits and "d" for number of digits after the decimal place. Note: the parameters of FLOAT are

deprecated as of v8.0.17

Range: -1.7976931348623157E+308 to

-2.2250738585072014E-308, 0, and 2.2250738585072014E-

308 to 1.7976931348623157E+308

DOUBLE PRECISION Synonym for DOUBLE

REAL Synonym for DOUBLE

Date

DATE A date value (no time).

Range 1000-01-01 to 9999-12-31

DATETIME (fsp) A date and time value. The parameter "fsp" is fractional seconds

precision or the number of fractional seconds that can be stored. Range: 1000-01-01 00:00:00.000000 to 9999-12-31

23:59:59.999999

TIMESTAMP (fsp) A timestamp value, stores date and time. Has a smaller range

> than DATETIME. The parameter "fsp" is fractional seconds precision or the number of fractional seconds that can be

stored.

Range: 1970-01-01 00:00:01.000000 UTC to 2038-01-19

03:14:07.999999

TIME (fsp) A time value. The parameter "fsp" is fractional seconds precision

or the number of fractional seconds that can be stored

Range: -838:59:59.000000 to 838:59:59.000000

YEAR A year in a 4-digit format.

Range: 1901 to 2155

Character

A fixed-length string. Right-padded with spaces up to the CHAR (n)

specified length of "n". Up to 255 bytes.

VARCHAR (n) A variable-length string. The length parameter of "n" can be from

0 to 65,535. Up to 65,535 bytes.

BINARY (n) Similar to CHAR but stores binary byte strings rather than

nonbinary strings. Parameter "n" is the number of bytes.

VARBINARY (n) Similar to VARCHAR but stores binary byte strings rather than

nonbinary strings. Parameter "n" is the number of bytes.

BLOB (n) A BLOB column that can store a value up to "n" bytes. Up to

65,535 bytes.

TINYBLOB A BLOB column with a smaller maximum length, up to 255 bytes.

TEXT (n) A text column, and parameter "n" is the maximum number of

bytes. Up to 65,535 bytes bytes.

TINYTEXT A text column with a smaller maximum length, up to 255 bytes.

MEDIUMBLOB A BLOB with a higher maximum length than BLOB. Up to

16,777,215 (2²⁴ – 1) bytes

A text column with a higher maximum length than TEXT. Up to **MEDIUMTEXT**

16,777,215 (2²⁴ – 1) bytes

LONGBLOB A BLOB column with a high maximum length. Up to

4,294,967,295 or 4GB (2³² – 1) bytes

LONGTEXT A text column with a high maximum length. Up to 4,294,967,295

or 4GB (2^32 - 1) bytes

A string object that can have only one value from the list of ENUM (value_list)

values specified, or NULL. Can have up to 65,535 items in its list.

SET (value_list) A string object that can have zero or more values from the list of

values specified. Can have up to 64 items in its list.

JSON Stores JSON Data

Other

GEOMETRY Stores geometry values of any type

POINT Stores a point in geometry

LINESTRING Stores a line shape

POLYGON Stores a polygon shape

MULTIPOINT Stores a collection of points

Stores a collection of lines MULTILINESTRING

BOOL

BOOLEAN

MULTIPOLYGON Stores a collection of polygons

GEOMETRYCOLLECTION Store a collection of geometry objects

Synonym for TINYINT(1). Zero is false, nonzero values are true.

Synonym for TINYINT(1). Zero is false,

nonzero values are true.