

Data types in MySQL

Data type	Length	Description
TINYINT	1 byte	Range from -128 to +127 (unsigned: from 0 to 255)
SMALLINT	2 bytes	Range from -32 768 to +32 767 (unsigned: from 0 to 65 535)
MEDIUMINT	3 bytes	Range from -8 388 608 to +8 388 607 (unsigned: from 0 to 16 777 215)
INT,INTEGER	4 bytes	Range from -2 147 483 648 to +2 147 483 647 (unsigned: from 0 to 4 294 967 295)
BIGINT	8 bytes	Range from -9 223 372 036 854 775 808 to +9 223 372 036 854 775 807 (unsigned: from 0 to 18 446 744 073 709 551 615)
BIT, BOOL	1 byte	Synonym for TINYINT(1) type
FLOAT		Range from -3.402823466E+38 to +3.402823466E+38
DOUBLE		Range from -1.7976931348623157E+308 to +1.7976931348623157E+308
DOUBLE PRECISION, REAL		Synonym for DOUBLE type
DECIMAL(m,d), DEC(m,d), NUMERIC(m,d)		The range sets the "m" and "d" parameters, the maximum range is the same as for DOUBLE type
DATE	'0000-00-00'	The date in the format "year-month-day" meaning " RRRR-MM-DD ". Range from 1000-01-01 to 9999-12-31
DATETIME	'0000-00-00 00:00:00'	Date and time. Range from 1000-01-01 00:00:00 to 9999-12-31 23:59:59 (format = " RRRR-MM-DD HH:MM:SS ")
TIMESTAMP(n)	'0000-00-00 00:00:00'	<p>Date and time in the range from 1970-01-01 00:00:00 to 2037-01-01 00:00:00 (all 14 digits are always stored !)</p> <p>The display format can be set by "m" parameter with the value of 14 (or missing), 12, 10, 8, 6, 4, or 2</p> <p>"RRRRMMDDHHMMSS", "RRMMDDHHMMSS", "RRMMDDHHMM", "RRRRMMDD", "RRMMDD", "YYMM", "YY"</p> <p>If no data is written into the cell of this type then the MySQL will add the current time of modification of the corresponding row</p>
TIME	'00:00:00'	Time range is from "-838:59:59" to "838:59:59" (format " HH:MM:SS ")
YEAR(n)	0000	YEAR(4) = range from 1901 to 2155, (format " RRRR "), YEAR(2) = range from 1970 to 2069

CHAR(m)		<p>The string length "m" can be in the range from 0 to 255</p> <p>If the entered string is shorter than defined, then the missing characters are filled automatically with spaces (the length is fixed)</p> <p>- CHAR (without "m") is considered to be CHAR(1)</p>
VARCHAR(m)		<p>The string length "m" can be in the range from 0 to 255</p> <p>If the entered string is shorter than defined, then the missing characters are not filled (the length is flexible), but the information about its length is also stored</p>
TINYBLOB, TINYTEXT		String length is max. 255 characters
BLOB, TEXT		String length is max. 65 535 characters
MEDIUMBLOB, MEDIUMTEXT		String length is max. 16 777 215 characters
LOB, LONGTEXT		String length is max. 4 294 967 295 characters
ENUM('item1','item2',...)		<p>Array of defined strings (items) of the max. number of 65 535</p> <p>The table cell may contain only a single item of the defined set</p> <p>Instead of using the 'item' name, the item order can also be used: 1 (instead of 'item1'), 2 (instead of 'item2')...</p>
SET('item1','item2',...)		<p>Array of defined strings (items) with the max. number of 64</p> <p>The table cell may contain multiple defined items</p>