

# MariaDB Datatypes - Numeric Datatypes (Integer)



There are several datatypes available for storing 'whole' numbers in MariaDB, these are in order of storage capacity, note that integers which are not signed can hold up to double the value ...

<b>Name</b>	<b>Storage</b>	<b>Range Signed</b>	<b>Range Unsigned</b>
tinyint	1 byte	-128 to 127	0 to 255
smallint	2 bytes	-32768 to 32767	0 to 65535
mediumint	3 bytes	-8388608 to 8388607	0 to 16777215
int	4 bytes	-2147483648 to 2147483647	0 to 4294967295
bigint	8 bytes	-9223372036854775808 to 9223372036854775807	0 to 18446744073709551615

# MariaDB Datatypes - Numeric Datatypes (Decimal)



These datatypes hold numeric values with decimal places ...

<b>Name</b>	<b>Storage</b>	<b>Range Signed</b>	<b>Range Unsigned</b>
float	1 byte	-128 to 127	0 to 255
double	2 bytes	-32768 to 32767	0 to 65535
decimal	3 bytes	-8388608 to 8388607	0 to 16777215

# MariaDB Datatypes - String Text Datatypes



These datatypes hold alphanumeric values ...

char(n)	Char is fixed length and is limited to 255 characters (specified by the 'n')
varchar(n)	Varchar is a variable length string and like Char is limited to 255 characters (specified by the 'n')
tinytext	Tinytext holds a string up to a maximum length of 255 characters
text	Text holds a string up to a maximum length of 65,535 characters
mediumtext	Mediumtext holds a string up to a maximum length of 16,777,215 characters
longtext	Longtext holds a string up to a maximum length of 4,294,967,295 characters

# MariaDB Datatypes - String Blob Datatypes



These datatypes hold binary values (Binary Large Objects) ...

blob	Blobs hold up to 65,535 bytes of data
mediumblob	Mediumblobs hold up to 16,777,215 bytes of data
longblob	Longblobs hold up to 4,294,967,295 bytes of data

# MariaDB Datatypes - String List Datatypes



These datatypes hold multiple values ...

enum (short for enumeration)	Enums hold up to 65,535 values, they are created so that the data field is limited only to values found in that list and are declared thus ...  <i>&lt;column&gt; enum('A', 'B', 'C')</i>
set	Sets can hold up to 64 values and will accept any combination of the 'set' within the record.

# MariaDB Datatypes - Date Datatypes



Valid Date Datatypes are ...

date	Dates hold a date value in the format of YYYY-MM-DD. The date can range from '1000-01-01' to '9999-12-31'.
time	Time holds number of hours, minutes and seconds in the format of HH:MM:SS. Time can range from '-838:59:59' to '838:59:59'
datetime	Datetime holds both a day and a time value in the format of YYYY-MM-DD HH:MM:SS. The datetime can range from '1000-01-01 00:00:00' to '9999-12-31 23:59:59'
timestamp	Timestamp stores the number of seconds since the Unix epoch in the format of YYYY-MM-DD HH:MM:SS The timestamp can range from '1970-01-01 00:00:01' to '2038-01-09 03:14:07'
year	Year can be stored in this datatype in either two or four digits. Two digits can range from 70 to 69 (1970 - 2069), four digits 1901 to 2155.