

# Mysql & MairaDB

- 



### char(size)

□□255□□  
varchar(size)  
□□□□  
tinytext(size)  
□□255□□  
binary(size)  
□□□□255□□□□  
text(size)  
□□□□65535□□  
mediumtext(size)  
□□□□16777215□□  
longtext(size)  
longtext□□□□4GB□□□4,294,967,295□□



### bit

□□0□1  
tinyint  
‐128□127□□□□□□□□□□□□□□□□0□255□  
smallint  
‐32768□32767□□□□□0□65535□  
mediumint  
‐8388608□8388607□□□□□0□16777215□  
int(integer)  
‐2147483648□2147483647□□□□□0□4294967295□  
bigint  
‐9223372036854775808□9223372036854775807□□□□□0□18446744073709551615□  
float  
□□□□□□□□4□□□□□□  
double  
□□□□□□□□float□□□□□□□8□□□□□□  
Signed

□□□□□  
Unsigned  
□□□□□  
Length  
□ ZeroFill □□□□□□□□□□□□  
ZeroFill

□□□□□ 0□□□□□□□□□□□□ ZeroFill□□□□□ Unsigned□

AUTO\_INCREMENT

□□□□□□□□□□□□□□□□□□□□

□□□□□□□

## date

□"1000-01-01"□"9999-12-31"□□□□□'yyyy-mm-dd'□  
datetime  
□"1000-01-01 00:00:00"□"9999-12-31 23:59:59"□□□□□'yyyy-mm-dd hh:mm:ss'□  
timestamp(m)  
□'1970-01-01 00:00:01' utc□'2038-01-19 03:14:07' utc□□□□□'yyyy-mm-dd hh:mm:ss'□  
time  
□'-838□59□59'□'838□59□59'□□□□□'hh:mm:ss'□  
year[(2/4)]  
□2□4□□□□□4□

□□(LOB)□□□

## tinyblob

□□255□□□□  
blob(size)  
□□65535□□□□  
mediumblob  
□□16777215□□□  
longtext  
□□□4GB□4,294,967,295□□□

□□□□

INET6  
IPv6 MAC  
JSON  
□□□ json\_valid □□□□□□□□□□ JSON □□  
ENUM  
□□□□□ 65,535 □□□□□  
SET  
□□□□□ 64 □□□□□

```
create database デモ; #データベース作成  
show databases; #データベース一覧
```

```
SELECT VERSION(); #バージョン  
SELECT USER(); #接続ユーザ  
SHOW
```

```
use デモ; #データベース選択
```

```
create table table00 (   
->  
->  
->  
-> );
```

```
MariaDB [(none)]> use demo;  
Database changed  
MariaDB [demo]> create table result (   
->     event_id MEDIUMINT NOT NULL AUTO_INCREMENT,  
->     status varchar(30),  
->     date datetime,  
->     primary key (event_id)  
-> );
```

```
drop database デモ; #データベース削除  
drop table テーブル名;  
alter table テーブル名 drop column カラム名;
```

テーブル名add カラム名

```
show columns from テーブル名 from データベース名; #カラム一覧
```

テーブル名

```
describe テーブル名;  
desc テーブル名;
```

```
select user,host from mysql.user; #
```

```
rename user 'root'@'127.0.0.1' to 'imaghost'@'127.0.0.1'; #
```

```
create user 'username'@'hostname' identified by ''; #
```

hostname%#

```
grant all on .* to 'username'@'localhost';
```

or

```
grant SELECT,INSERT,UPDATE,DELETE on .* to 'username'@'hostname';
```

#

```
show grants for 'user'@'hostname'; #
```

```
show grants; #
```

```
revoke all privileges on .table from 'username'@'hostname';
```

#

```
revoke all privileges,grant option from 'username'@'hostname';
```

#

```
drop user 'username'@'hostname'; #
```

```
mysql_secure_installation #
```

**select** #

#

```
select * from `#`;
```

```
select * from `news`;
```

#

```
select `#`, `#` from `#`;
```

```
select `id`, `name` from `news`;
```

## where 何时

何时 "1" 何时

```
select * from `何时` where `何时` = 1;  
select * from `news` where `id` = 1;
```

何时"1"何时"10"何时

```
select * from `何时` where `何时` = 1 and `何时` > 10;  
select * from `news` where `id` = 1 and `pageviews` > 10;
```

## where in 何时 何时

何时 "1" 何时 "2" 何时 "3" 何时

```
select * from `何时` where `何时` in (1, 2, 3);  
select * from `news` where `id` in (1, 2, 3);
```

## where is null 何时 何时 null

何时 "null" 何时

```
select * from `何时` where `何时` is null;  
select * from `news` where `id` is null;
```

## where is not null 何时 何时 null

何时 "null" 何时

```
select * from `何时` where `何时` is not null;  
select * from `news` where `id` is not null;
```

## order by 何时

何时何时何时

```
select * from `何时` order by `何时` asc;  
select * from `news` order by `id` asc;
```

何时何时何时

```
select * from `电影` order by `id` desc;  
select * from `news` order by `id` desc;
```

电影

```
select * from `电影` order by binary(CONVERT(`名称` using big5))  
select * from news order by binary(CONVERT(`name` using big5))
```

limit 电影

电影

```
SELECT * FROM `电影` LIMIT 5  
SELECT * FROM `news` LIMIT 5
```

电影(10~15)

```
SELECT * FROM `电影` LIMIT 5,10  
SELECT * FROM `news` LIMIT 5,10
```

group 电影

电影

```
SELECT * FROM `电影` GROUP BY `类型`;  
SELECT * FROM `news` GROUP BY `release_date`;
```

电影(计数)

```
SELECT COUNT(*) FROM `电影` GROUP BY `类型`;  
SELECT COUNT(*) FROM `news` GROUP BY `release_date`;
```

insert 电影

电影

```
insert into `电影`(`类型`, `名称`) VALUES ('科幻', '星球大战');  
insert into `news`(`title`, `release_date`) VALUES ('星球大战', '1990-05-09');
```

ALTER TABLE 电影

```
ALTER TABLE `新闻` ADD `删除时间` 评论 COMMENT '删除时间';
ALTER TABLE `news` ADD deleted_at TIMESTAMP NULL COMMENT '删除时间';
```

## update 语句

```
UPDATE `新闻` SET `标题` = '新闻标题', `发布日期` = '2020-02-02';
UPDATE `news` SET `title` = '新闻标题!', `release_date` = '2020-02-02';
```

### 5. 表的更新语句

SQL 语句：`UPDATE 表名 'Premium' 表达式 total_purchases`

```
UPDATE customers
SET total_purchases =
    SELECT SUM(amount)
    FROM orders
    WHERE orders.customer_id = customers.customer_id
)
WHERE customer_type = 'Premium';
```

## MD5

```
update '密码' pswd=md5(pswd);
```

```
1 | UPDATE `testmd5` SET pswd=MD5(pswd);
```

运行后刷新得到结果

The screenshot shows the MySQL Workbench interface with the '2 表数据' (Table Data) tab selected. A table named 'testmd5' is displayed with four columns: id, name, pswd, and a primary key column. The data rows are:

	id	name	pswd
	1	张三	1f32aa4c9ald2ea010adcf2348166a04
	4	小陈	25d55ad283aa400af464c76d713c07ad
	2	李四	e10adc3949ba59abbe56e057f20f883e
	3	王五	fcea920f7412b5da7be0cf42b8c93759
*	(NULL)	(NULL)	(NULL)

```
1 | UPDATE `testmd5` SET pwd=MD5(pwd);
```

运行后刷新得到结果

	<b>id</b>	<b>name</b>	<b>pwd</b>
	1	张三	lf32aa4c9ald2ea010adcf2348166a04
	4	小陈	25d55ad283aa400af464c76d713c07ad
	2	李四	e10adc3949ba59abbe56e057f20f883e
	3	王五	fcea920f7412b5da7be0cf42b8c93759
*	(NULL)	(NULL)	(NULL)

delete 语句

删除 id = "1" 的记录

```
delete from `testmd5` WHERE `id` = 1;  
delete from `news` WHERE `id` = 1;
```

truncate 语句

清空表

```
truncate table `testmd5`;  
truncate table `news`;
```

MD5

```
md5('张三')
```