

Mysql & MairaDB

- [MySQL](#)



char(size)

255
varchar(size)
tinytext(size)
255
binary(size)
255
text(size)
65535
mediumtext(size)
16777215
longtext(size)
longtext4GB4,294,967,295



bit

01
tinyint
-1281270255
smallint
-3276832767065535
mediumint
-83886088388607016777215
int(integer)
-2147483648214748364704294967295
bigint
-92233720368547758089223372036854775807018446744073709551615
float
4
double
float8
Signed

unsigned

unsigned

length

length

zeroFill (boolean)

zeroFill

0 (boolean) zeroFill (boolean) unsigned (boolean)

AUTO_INCREMENT

(boolean)

(boolean)

date

datetime (string)

datetime

timestamp (string)

timestamp(m)

time (string)

time

year[(2/4)] (string)

year[(2/4)]

year[(2/4)] (string)

(LOB) (string)

tinyblob

blob(size) (string)

blob(size)

mediumblob (string)

mediumblob

longtext (string)

longtext

4GB (4,294,967,295) (string)

(string)

INET6

IPv6 MAC

JSON

json_valid (boolean) JSON (string)

ENUM

65,535 (string)

SET

64 (string)

create database [db]; # [db]

show databases; # [db]

SELECT VERSION(); # [db]

SELECT USER(); # [db]

SHOW

use [db]; # [db]

create table table[db] (

->

->

->

->);

```
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 [db]; # [db]

drop table [db];

alter table [db] drop column [db];

[db]add [db]

show columns from [db] from [db]; # [db]

[db]

describe [db];

desc [db];

```
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 条件

查询 id 为 1 的记录

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

查询 id 为 1 且 pageviews 大于 10 的记录

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

where in 列表

查询 id 为 1, 2, 3 的记录

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

where is null 是否为空

查询 id 为 null 的记录

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

where is not null 是否不为空

查询 id 不为 null 的记录

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

order by 排序

按 id 升序排列

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

按 id 降序排列

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

test

```
select * from `test` order by binary(CONVERT(`id` using big5))
select * from news order by binary(CONVERT(`name` using big5))
```

limit 测试

test

```
SELECT * FROM `test` LIMIT 5
SELECT * FROM `news` LIMIT 5
```

test(10~15)

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

group 测试

test

```
SELECT * FROM `test` GROUP BY `id`;
SELECT * FROM `news` GROUP BY `release_date`;
```

test(10)

```
SELECT COUNT(*) FROM `test` GROUP BY `id`;
SELECT COUNT(*) FROM `news` GROUP BY `release_date`;
```

insert 测试

test

```
insert into `test` (`id`, `name`) VALUES ('1', 'test');
insert into `news` (`title`, `release_date`) VALUES ('test', '1990-05-09');
```

ALTER TABLE 测试

```
ALTER TABLE `users` ADD `password` VARCHAR(255) COMMENT '密码';
ALTER TABLE `news` ADD deleted_at TIMESTAMP NULL COMMENT '删除时间';
```

update 用户

```
UPDATE `users` SET `name` = '张三', `age` = '25';
UPDATE `news` SET `title` = 'MySQL入门!', `release_date` = '2020-02-02';
```

5. 更新用户信息

SQL 更新 'Premium' 用户的 total_purchases 值

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

更新密码

```
update 'users' pwd=md5(pwd);
```

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

运行后刷新得到结果

| 1 信息 2 表数据 3 信息 | | | |
|-----------------|--------|----------------------------------|--|
| id | name | pwd | |
| 1 | 张三 | 1f32aa4c9ald2ea010adcf2348166a04 | |
| 4 | 小陈 | 25d55ad283aa400af464c76d713c07ad | |
| 2 | 李四 | e10adc3949ba59abbe56e057f20f883e | |
| 3 | 王五 | fcea920f7412b5da7be0cf42b8c93759 | |
| * | (NULL) | (NULL) | |


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

运行后刷新得到结果

| 1 信息 | | |
|-------|--------|-----------------------------------|
| 2 表数据 | | |
| 3 信息 | | |
| id | name | pwd |
| 1 | 张三 | 1f32aa4c9ald2ea010adcf2348166a04 |
| 4 | 小陈 | 25d55ad283aaa400af464c76d713c07ad |
| 2 | 李四 | e10adc3949ba59abbe56e057f20f883e |
| 3 | 王五 | fcea920f7412b5da7be0cf42b8c93759 |
| * | (NULL) | (NULL) |

delete

删除id为1的记录

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

truncate

清空表数据

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

md5

```
md5('1234')
```