# cd

c:\xampp

# mysql -u root -p

Enter password:

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 8

Server version: 10.4.32-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>

MariaDB [(none)]> select database();

+------------+

| database() |

+------------+

| NULL |

+------------+

1 row in set (0.000 sec)

MariaDB [(none)]> select 2 + 5;

+-------+

| 2 + 5 |

+-------+

| 7 |

+-------+

1 row in set (0.000 sec)

MariaDB [(none)]> select 2 + 5'sum';

+-----+

| sum |

+-----+

| 7 |

+-----+

1 row in set (0.000 sec)

MariaDB [(none)]> select now();

+---------------------+

| now() |

+---------------------+

| 2025-06-15 17:53:28 |

+---------------------+

1 row in set (0.000 sec

MariaDB [(none)]> select 2\*6 as addition;

+----------+

| addition |

+----------+

| 12 |

+----------+

1 row in set (0.000 sec)

MariaDB [(none)]> select 10/3 'example for divide';

+--------------------+

| example for divide |

+--------------------+

| 3.3333 |

+--------------------+

1 row in set (0.055 sec)

MariaDB [(none)]> select 5 into @i;

Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> select @i;

+------+

| @i |

+------+

| 5 |

+------+

1 row in set (0.000 sec)

MariaDB [(none)]> select @j;

+------+

| @j |

+------+

| NULL |

+------+

1 row in set (0.000 sec)

MariaDB [(none)]> set @j=9;

Query OK, 0 rows affected (0.000 sec)

MariaDB [(none)]> select @j;

+------+

| @j |

+------+

| 9 |

+------+

1 row in set (0.000 sec)

MariaDB [(none)]> select @i + @j;

+---------+

| @i + @j |

+---------+

| 14 |

+---------+

1 row in set (0.000 sec)

MariaDB [(none)]> set @k=@j + @i;

Query OK, 0 rows affected (0.000 s

MariaDB [(none)]> select @k;

+------+

| @k |

+------+

| 14 |

+------+

1 row in set (0.000 sec)

MariaDB [(none)]> select @j/@i into @x;

Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> select @x;

+-------------+

| @x |

+-------------+

| 1.800000000 |

+-------------+

1 row in set (0.000 sec)

MariaDB [(none)]> show databases;

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| phpmyadmin |

| test |

+--------------------+

5 rows in set (0.040 sec)

MariaDB [(none)]> show tables;

ERROR 1046 (3D000): No database selected

MariaDB [(none)]> drop database if exists dbstk;

Query OK, 0 rows affected, 1 warning (0.000 sec)

MariaDB [(none)]> show warnings;

+-------+------+-----------------------------------------------------+

| Level | Code | Message |

+-------+------+-----------------------------------------------------+

| Note | 1008 | Can't drop database 'dbstk'; database doesn't exist |

+-------+------+-----------------------------------------------------+

1 row in set (0.000 sec)

MariaDB [(none)]> create database if not exists dbstk;

Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> show databases;

+--------------------+

| Database |

+--------------------+

| dbstk |

| information\_schema |

| mysql |

| performance\_schema |

| phpmyadmin |

| test |

+--------------------+

6 rows in set (0.001 sec)

MariaDB [(none)]> create database if not exists dbstk;

Query OK, 0 rows affected, 1 warning (0.001 sec)

MariaDB [(none)]> show warnings;

+-------+------+------------------------------------------------+

| Level | Code | Message |

+-------+------+------------------------------------------------+

| Note | 1007 | Can't create database 'dbstk'; database exists |

+-------+------+------------------------------------------------+

1 row in set (0.000 sec)

MariaDB [(none)]> use dbstk;

Database changed

MariaDB [dbstk]> show tables;

Empty set (0.001 sec)

MariaDB [dbstk]> drop table if exists tbler;

Query OK, 0 rows affected, 1 warning (0.255 sec)

MariaDB [dbstk]> show warnings;

+-------+------+-----------------------------+

| Level | Code | Message |

+-------+------+-----------------------------+

| Note | 1051 | Unknown table 'dbstk.tbler' |

+-------+------+-----------------------------+

1 row in set (0.000 sec)

MariaDB [dbstk]> show tables;

Empty set (0.001 sec)

MariaDB [dbstk]> create table if not exists tbler(rno int primary key auto\_increment)auto\_increment=1001;

Query OK, 0 rows affected (0.249 sec)

MariaDB [dbstk]> desc tbler;

+-------+---------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+---------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

+-------+---------+------+-----+---------+----------------+

1 row in set (0.020 sec)

MariaDB [dbstk]> show tables;

+-----------------+

| Tables\_in\_dbstk |

+-----------------+

| tbler |

+-----------------+

1 row in set (0.001 sec)

MariaDB [dbstk]> select \* from tbler;

Empty set (0.000 sec)

MariaDB [dbstk]> alter table tbler add column sname varchar(5) not null;

Query OK, 0 rows affected (0.237 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> show tables;

+-----------------+

| Tables\_in\_dbstk |

+-----------------+

| tbler |

+-----------------+

1 row in set (0.001 sec)

MariaDB [dbstk]> alter table tbler add column m2 numeric(5,2) not null check(m2>=0 and m2<=99.99);

Query OK, 0 rows affected (0.205 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+-------+--------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

+-------+--------------+------+-----+---------+----------------+

3 rows in set (0.016 sec)

MariaDB [dbstk]> alter table tbler add column m1 numeric(5,2) not null check(m1>=0 and m1<=99.99);

Query OK, 0 rows affected (0.167 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+-------+--------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

| m1 | decimal(5,2) | NO | | NULL | |

+-------+--------------+------+-----+---------+----------------+

4 rows in set (0.016 sec)

MariaDB [dbstk]> alter table tbler drop column m2;

Query OK, 0 rows affected (0.194 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+-------+--------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m1 | decimal(5,2) | NO | | NULL | |

+-------+--------------+------+-----+---------+----------------+

3 rows in set (0.048 sec)

MariaDB [dbstk]> alter table tbler add column m2 numeric(5,2) not null check(m2>=0 and m2<=99.99);

Query OK, 0 rows affected (0.654 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+-------+--------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m1 | decimal(5,2) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

+-------+--------------+------+-----+---------+----------------+

4 rows in set (0.107 sec)

MariaDB [dbstk]> alter table tbler drop column m1;

Query OK, 0 rows affected (0.098 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+-------+--------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

+-------+--------------+------+-----+---------+----------------+

3 rows in set (0.015 sec)

MariaDB [dbstk]> alter table tbler add column m1 numeric(5,2) not null check(m1>=0 and m1<=99.99) after sname;

Query OK, 0 rows affected (0.184 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> insert into tbler (sname,m1,m2)values('x5',56.5,63);

Query OK, 1 row affected (0.149 sec

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+

| rno | sname | m1 | m2 |

+------+-------+-------+-------+

| 1001 | x5 | 56.50 | 63.00 |

+------+-------+-------+-------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select rno,m2 from tbler;

+------+-------+

| rno | m2 |

+------+-------+

| 1001 | 63.00 |

+------+-------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select rno,(m1+m2)'total' from tbler;

+------+--------+

| rno | total |

+------+--------+

| 1001 | 119.50 |

+------+--------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select rno,m1+m2 from tbler;

+------+--------+

| rno | m1+m2 |

+------+--------+

| 1001 | 119.50 |

+------+--------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select rno,(m1+m2)'total',(m1+m2)/2'average',if(m1>34.4 and m2>34.4,'pass','fail')'result' from tbler;

+------+--------+-----------+--------+

| rno | total | average | result |

+------+--------+-----------+--------+

| 1001 | 119.50 | 59.750000 | pass |

+------+--------+-----------+--------+

1 row in set (0.001 sec)

MariaDB [dbstk]> select convert(10/3,decimal(5,2));

+----------------------------+

| convert(10/3,decimal(5,2)) |

+----------------------------+

| 3.33 |

+----------------------------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select cast(10/3 as int);

+-------------------+

| cast(10/3 as int) |

+-------------------+

| 3 |

+-------------------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select format(10/3,2);

+----------------+

| format(10/3,2) |

+----------------+

| 3.33 |

+----------------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select format(10/10,2);

+-----------------+

| format(10/10,2) |

+-----------------+

| 1.00 |

+-----------------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select rno,sname,m1,m2,convert(m1+m2,decimal(5,2))'total',convert((m1+m2)/2,decimal(5,2))'average',

-> if(m1>34.4 and m2>34.4,'pass','fail')'result' from tbler;

+------+-------+-------+-------+--------+---------+--------+

| rno | sname | m1 | m2 | total | average | result |

+------+-------+-------+-------+--------+---------+--------+

| 1001 | x5 | 56.50 | 63.00 | 119.50 | 59.75 | pass |

+------+-------+-------+-------+--------+---------+--------+

1 row in set (0.001 sec)

MariaDB [dbstk]> drop view if exists view;

Query OK, 0 rows affected, 1 warning (0.000 sec)

MariaDB [dbstk]> show warnings;

+-------+------+----------------------------+

| Level | Code | Message |

+-------+------+----------------------------+

| Note | 4092 | Unknown VIEW: 'dbstk.view' |

+-------+------+----------------------------+

1 row in set (0.000 sec)

MariaDB [dbstk]> create view if not exists vwer as select rno,sname,m1,m2,convert(m1+m2,decimal(5,2))'total',convert((m1+m2)/2,decimal(5,2))'average',

-> if(m1>34.4 and m2>34.4,'pass','fail')'result' from tbler;

Query OK, 0 rows affected (0.114 sec)

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+

| rno | sname | m1 | m2 |

+------+-------+-------+-------+

| 1001 | x5 | 56.50 | 63.00 |

+------+-------+-------+-------+

1 row in set (0.000 sec)

MariaDB [dbstk]> select \* from vwer;

+------+-------+-------+-------+--------+---------+--------+

| rno | sname | m1 | m2 | total | average | result |

+------+-------+-------+-------+--------+---------+--------+

| 1001 | x5 | 56.50 | 63.00 | 119.50 | 59.75 | pass |

+------+-------+-------+-------+--------+---------+--------+

1 row in set (0.001 sec)

MariaDB [dbstk]> insert into tbler(sname,m1,m2)values('x3',52,45.5),('x1',72.5,61),('x2',98,20);

Query OK, 3 rows affected (0.197 sec)

Records: 3 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+

| rno | sname | m1 | m2 |

+------+-------+-------+-------+

| 1001 | x5 | 56.50 | 63.00 |

| 1002 | x3 | 52.00 | 45.50 |

| 1003 | x1 | 72.50 | 61.00 |

| 1004 | x2 | 98.00 | 20.00 |

+------+-------+-------+-------+

4 rows in set (0.001 sec)

MariaDB [dbstk]> select 2+5,/\*author: stk\*/3\*9;

+-----+-----+

| 2+5 | 3\*9 |

+-----+-----+

| 7 | 27 |

+-----+-----+

1 row in set (0.000 sec)

MariaDB [dbstk]> select 2+5,3\*9;--author:stk--

+-----+-----+

| 2+5 | 3\*9 |

+-----+-----+

| 7 | 27 |

+-----+-----+

1 row in set (0.000 sec)

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+

| rno | sname | m1 | m2 |

+------+-------+-------+-------+

| 1001 | x5 | 56.50 | 63.00 |

| 1002 | x3 | 52.00 | 45.50 |

| 1003 | x1 | 72.50 | 61.00 |

| 1004 | x2 | 98.00 | 20.00 |

+------+-------+-------+-------+

4 rows in set (0.000 sec)

MariaDB [dbstk]> drop view if exists vwer;

Query OK, 0 rows affected (0.001 sec)

+-------+--------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m1 | decimal(5,2) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

+-------+--------------+------+-----+---------+----------------+

4 rows in set (0.241 sec)

MariaDB [dbstk]> alter table tbler add column result enum('fail','pass')default'fail'not null;

Query OK, 0 rows affected (0.174 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+--------+---------------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+--------+---------------------+------+-----+---------+----------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m1 | decimal(5,2) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

| result | enum('fail','pass') | NO | | fail | |

+--------+---------------------+------+-----+---------+----------------+

5 rows in set (0.021 sec)

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+--------+

| rno | sname | m1 | m2 | result |

+------+-------+-------+-------+--------+

| 1001 | x5 | 56.50 | 63.00 | fail |

| 1002 | x3 | 52.00 | 45.50 | fail |

| 1003 | x1 | 72.50 | 61.00 | fail |

| 1004 | x2 | 98.00 | 20.00 | fail |

+------+-------+-------+-------+--------+

4 rows in set (0.001 sec

MariaDB [dbstk]> alter table tbler add column total decimal(6,2) as (m1+m2),add column average decimal(5,2) as ((m1+m2)/2);

Query OK, 0 rows affected (0.297 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [dbstk]> desc tbler;

+---------+---------------------+------+-----+---------+-------------------+

| Field | Type | Null | Key | Default | Extra |

+---------+---------------------+------+-----+---------+-------------------+

| rno | int(11) | NO | PRI | NULL | auto\_increment |

| sname | varchar(5) | NO | | NULL | |

| m1 | decimal(5,2) | NO | | NULL | |

| m2 | decimal(5,2) | NO | | NULL | |

| result | enum('fail','pass') | NO | | fail | |

| total | decimal(6,2) | YES | | NULL | VIRTUAL GENERATED |

| average | decimal(5,2) | YES | | NULL | VIRTUAL GENERATED |

+---------+---------------------+------+-----+---------+-------------------+

7 rows in set (0.021 sec)

MariaDB [dbstk]> update tbler set m2=45 where rno=1004;

Query OK, 1 row affected (0.239 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+--------+--------+---------+

| rno | sname | m1 | m2 | result | total | average |

+------+-------+-------+-------+--------+--------+---------+

| 1001 | x5 | 56.50 | 63.00 | fail | 119.50 | 59.75 |

| 1002 | x3 | 52.00 | 45.50 | fail | 97.50 | 48.75 |

| 1003 | x1 | 72.50 | 61.00 | fail | 133.50 | 66.75 |

| 1004 | x2 | 98.00 | 45.00 | fail | 143.00 | 71.50 |

+------+-------+-------+-------+--------+--------+---------+

4 rows in set (0.000 sec)

MariaDB [dbstk]> update tbler set m1=m1-10;

Query OK, 4 rows affected (0.029 sec)

Rows matched: 4 Changed: 4 Warnings: 0+

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+--------+--------+---------+

| rno | sname | m1 | m2 | result | total | average |

+------+-------+-------+-------+--------+--------+---------+

| 1001 | x5 | 46.50 | 63.00 | fail | 109.50 | 54.75 |

| 1002 | x3 | 42.00 | 45.50 | fail | 87.50 | 43.75 |

| 1003 | x1 | 62.50 | 61.00 | fail | 123.50 | 61.75 |

| 1004 | x2 | 88.00 | 45.00 | fail | 133.00 | 66.50 |

+------+-------+-------+-------+--------+--------+---------+

4 rows in set (0.000 sec)

MariaDB [dbstk]> set autocommit=false;

Query OK, 0 rows affected (0.097 sec)

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+--------+--------+---------+

| rno | sname | m1 | m2 | result | total | average |

+------+-------+-------+-------+--------+--------+---------+

| 1001 | x5 | 46.50 | 63.00 | fail | 109.50 | 54.75 |

| 1002 | x3 | 42.00 | 45.50 | fail | 87.50 | 43.75 |

| 1003 | x1 | 62.50 | 61.00 | fail | 123.50 | 61.75 |

| 1004 | x2 | 88.00 | 45.00 | fail | 133.00 | 66.50 |

+------+-------+-------+-------+--------+--------+---------+

4 rows in set (0.000 sec)

MariaDB [dbstk]> set autocommit=true;

Query OK, 0 rows affected (0.000 sec)

MariaDB [dbstk]> select \* from tbler;

+------+-------+-------+-------+--------+--------+---------+

| rno | sname | m1 | m2 | result | total | average |

+------+-------+-------+-------+--------+--------+---------+

| 1001 | x5 | 46.50 | 63.00 | fail | 109.50 | 54.75 |

| 1002 | x3 | 42.00 | 45.50 | fail | 87.50 | 43.75 |

| 1003 | x1 | 62.50 | 61.00 | fail | 123.50 | 61.75 |

| 1004 | x2 | 88.00 | 45.00 | fail | 133.00 | 66.50 |

+------+-------+-------+-------+--------+--------+---------+

4 rows in set (0.000 sec)

MariaDB [dbstk]> delete from tbler;

Query OK, 4 rows affected (0.120 sec)

MariaDB [dbstk]> rollback;

Query OK, 0 rows affected (0.000 sec)

MariaDB [dbstk]> select \* from tbler;

Empty set (0.000 sec)

MariaDB [dbstk]> truncate table tbler;

Query OK, 0 rows affected (0.345 sec)