

- [MySQL](#)
 - [Database](#)
 - [Table](#)
 - [Admin](#)

MySQL

Database

1. `SHOW DATABASES;` show all databases
2. `CREATE DATABASE [name];` create database

```
CREATE DATABASE hello_world;  
CREATE DATABASE `hello world`;
```

3. `USE [name];` use database

```
USE hello_world;  
USE `hello world`;
```

4. `SELECT DATABASE();` show selected database
5. `SHOW VARIABLES LIKE 'datadir';` show data store path

Table

1. `SHOW TABLES;` show all tables
2. `SHOW CREATE TABLE [name]` show created table
3. `DESC [name];` show datatype in this table
4. `INSERT INTO [name] ([col1],[col2],[col3]) VALUES ([value1],[value2],[value3]),([value1],[value2],[value3]);` insert
5. `UPDATE [name] SET [col1]=[value1],[col2]=[value2] WHERE [col3]=[value3];` update

6. `DELETE FROM [name] WHERE [col1]=[value1] AND [col2]=[value2];` delete
7. `TRUNCATE TABLE [name];` delete the whole table
8. `CREATE TABLE [name] LIKE [name];` clone structure of table
9. create table

- ```
CREATE TABLE [name](
 id INT NOT NULL PRIMARY KEY AUTO_INCREMENT COMMENT 'Primary Key',
 create_time DATETIME COMMENT 'Create Time',
 update_time DATETIME COMMENT 'Update Time',
 [column] VARCHAR(255) COMMENT '',
 [colume] INT(10) DEFAULT NULL,
 [colume] FLOAT(32)
) DEFAULT CHARSET UTF8 COMMENT '';
```

datatype:

- Numeric: `TINYINT`, `SMALLINT`, `MEDIUMINT`, `INT`, `BIGINT`, `BIT`
- Floating numbers: `DECIMAL`, `FLOAT`, `DOUBLE`
- Strings: `CHAR`, `VARCHAR`, `BINARY`, `VARBINARY`, `BLOB`, `TEXT`, `ENUM`, `SET`
- Json: `JSON` constrain:
- primary key(PK): `PRIMARY KEY`
- auto increment: `AUTO_INCREMENT`
- not null: `NOT NULL`
- unique: `UNIQUE`
- default: `DEFAULT NULL`

select table

- `SELECT * FROM [name];` show table all data
- `SELECT [col1],[col2] FROM [name] LIMIT [int];` see specific colume
- `SELECT COUNT(*) FROM [name];` count items
- `SELECT [col] FROM [name] WHERE [col1]=[value1] AND [col2]=[value2];`
- `SELECT [col] FROM [name] WHERE [col1] in ([value1],[value2]);`
- `SELECT [col] FROM [name] WHERE [col1] BETWEEN [value1] AND [value2];`

- `SELECT [col] FROM [name] WHERE [col1] RLIKE [regex];`
- `SELECT [col1],[col2] FROM [name] ORDER BY [col3];`
- `SELECT SUM([col]),MAX([col]),MIN([col]),AVG([col]) FROM [name] WHERE [col]>200;`
- `SELECT COUNT([col]) FROM [name] GROUP BY [col] HAVING [col];`

# Admin

---

1. `CREATE USER [user_name]@[host] IDENTIFIED BY [password];` create user ([host]=% login anywhere)
2. `SELECT user,host FROM mysql.user;` see user and host
3. `GRANT [privileges] ON [database_name].[table_name] TO [user_name];`  
grant privileges to user. privileges:SELECT,UPDATE,DELETE,ALL for all database\_name use \* for all table\_name use \*
4. `RENAME [user_name]@[host] TO [user_name]@[host];` rename user
5. `ALTER USER [user_name]@[host] IDENTIFIED BY [password];` change password
6. `REVOKE [privileges] ON [database_name].[table_name] TO [user_name];` revoke privileges to user.
7. `DROP USER [user_name]@[host];` Drop user
8. `flush privileges;` refresh privileges