## 创建数据库

```
CREATE DATABASE <数据库名称>;
```

## 使用数据库

```
USE <数据库名称>;
```

## 删除数据库

```
DROP DATABASE <数据库名称>;
```

## 创建数据表

```
CREATE TABLE <表名> (
    <列名> <数据类型> [<列级完整性约束条件>]
    [, <列名> <数据类型> [<列级完整性约束条件>]]
    ...
    [, <表级完整性约束条件>]
);
```

```
CREATE TABLE users (
    id INT NOT NULL,
    username VARCHAR (50),
    password VARCHAR (50) DEFAULT '12345',
    age int DEFAULT 18,
    PRIMARY KEY (id)
);
```

## 删除数据表

```
DROP TABLE <表名>;
```

```
DROP TABLE users;
```

## 插入数据

```
INSERT INTO <表名> [ (<列名1> [, <列名2>] ...) ]
VALUES (<值1> [, <值2>]...);
```

```
INSERT INTO users (id, username, password, age)
VALUES (1, 'zhangsan', '666666', 28);

INSERT INTO users
VALUES (2, 'lisi', '1q2w3e', 24);

INSERT INTO users (id)
VALUES (3);

INSERT INTO users (username, id)
VALUES ('wangwu', 4);
```

| id | username | password | age |
|----|----------|----------|-----|
| 1 | zhangsan | 666666 | 28 |
| 2 | lisi | 1q2w3e | 24 |
| 3 | | 12345 | 18 |
| 4 | wangwu | 12345 | 18 |

## 删除数据 #

```
DELETE FROM <表名>
[WHERE <条件>];
```

```
-- INSERT INTO users
-- VALUES (5, 'wangwu', '1qaz2wsx', 100);

DELETE FROM users
WHERE id = 5;

DELETE FROM users
WHERE age = 100;
```

## 修改数据 #

```
UPDATE <表名>
SET <列名> = <表达式> [, <列名> = <表达式> ...]
[WHERE <条件>];
```

```
UPDATE users
SET password = '54321', age = 19
WHERE username = 'wangwu';

UPDATE users
SET age = age + 20
WHERE username = 'lisi';
```

| id | username | password | age |
|---|---|---|---|
| 1 | zhangsan | 666666 | 28 |
| 2 | lisi | 1q2w3e | 44 |
| 3 |  | 12345 | 18 |
| 4 | wangwu | 54321 | 19 |

## 查询数据 #

```
SELECT <目标列表达式> [, <目标列表达式>] ...
FROM <表名>
[WHERE <条件表达式>];
```

```
SELECT id, username, password, age
FROM users;
```

| id | username | password | age |
|---|---|---|---|
| 1 | zhangsan | 666666 | 28 |
| 2 | lisi | 1q2w3e | 44 |
| 3 |  | 12345 | 18 |
| 4 | wangwu | 54321 | 19 |

```
SELECT *
FROM users;
```

| id | username | password | age |
|---|---|---|---|
| 1 | zhangsan | 666666 | 28 |
| 2 | lisi | 1q2w3e | 44 |
| 3 |  | 12345 | 18 |
| 4 | wangwu | 54321 | 19 |

```
SELECT username
FROM users
WHERE id=4;
```

| username |
| --- |
| wangwu |

```sql
SELECT *
FROM users
WHERE username IS NULL;
```

| id | username | password | age |
| --- | --- | --- | --- |
| 3 | | 12345 | 18 |

```sql
SELECT *
FROM users
WHERE username IS NOT NULL;
```

| id | username | password | age |
| --- | --- | --- | --- |
| 1 | zhangsan | 666666 | 28 |
| 2 | lisi | 1q2w3e | 44 |
| 4 | wangwu | 54321 | 19 |

```sql
SELECT *
FROM users
WHERE age IN (18, 19);
```

| id | username | password | age |
| --- | --- | --- | --- |
| 3 | | 12345 | 18 |
| 4 | wangwu | 54321 | 19 |