用户文档

打包后的服务端和客户端位于 `bin` 目录下，首先启动服务端：

```
java -jar server.jar
```

再启动客户端：

```
java -jar client.jar
```

在客户端进行连接：

```
connect;
```

创建数据库：

```
create database test;
```

切换数据库：

```
use test;
```

创建表：

```
create table student (id int primary key, name string(10));
```

查看所有数据库：

```
show databases;
```

查看所有表：

```
show tables;
```

查看某个表的元数据：

```
show table student;
```

插入一条记录：

```
insert into student (id, name) values (1, 'asd');
insert into student (id, name) values (2, 'sdf');
insert into student (id, name) values (3, 'dfg');
insert into student (id, name) values (4, 'fgh');
insert into student (id, name) values (5, 'ghj');
insert into student (id, name) values (6, 'hjk');
insert into student (id, name) values (7, 'jkl');
```

删除一条记录：

```
delete from student where id=1
```

查询一条记录：

```
select id, name from student where condition1 (&& condition2) (|| condition2)
```

查询多表记录：

```
select * from book join lend on book.ID=lend.book_ID
```

修改一条记录：

```
update student set name='123' where id=2
```

删除表：

```
drop table student;
```

删除数据库：

```
drop database test;
```

关闭连接：

```
disconnect;
```

完整测试流程（简单的图书馆系统）

```
CREATE DATABASE library
USE library

CREATE TABLE book (name String(256), ID Int not null, PRIMARY KEY(ID))
DROP TABLE book
CREATE TABLE book (name String(256), ID Int not null, PRIMARY KEY(ID))

// 测试插入
INSERT INTO book VALUES ('Basic Math', 120)
INSERT INTO book VALUES ('Basic Physics', 121)
INSERT INTO book VALUES ('Chinese', 122)
INSERT INTO book VALUES ('Art', 130)
INSERT INTO book VALUES ('Computer science', 131)
INSERT INTO book VALUES ('Introduction', 220)
INSERT INTO book VALUES ('People', 221)
// 测试删除
DELETE FROM book WHERE ID=120
INSERT INTO book VALUES ('Basic Math', 120)
// 测试更改
UPDATE book SET name= 'Advanced Physics' WHERE ID=121
UPDATE book SET name= 'Advanced Math' WHERE name='Basic Math'
```

```
UPDATE book SET ID=1210 WHERE ID=121
UPDATE book SET ID=121 WHERE ID=1210
// 测试选择
SELECT name FROM book WHERE ID>100
SELECT name, ID FROM book WHERE ID>100
SELECT * FROM book WHERE ID=121
SELECT * FROM book WHERE ID>200
SELECT * FROM book WHERE ID<200
// 测试多条件查询
SELECT * FROM book WHERE ID>121 && ID<200
SELECT * FROM book WHERE ID<122 && ID>150
SELECT * FROM book WHERE ID<122 || ID>150

// 建立新表
CREATE TABLE lend (reader_ID Int not null, book_ID Int not null, PRIMARY
KEY(book_ID))
INSERT INTO lend VALUES (12, 121)
INSERT INTO lend VALUES (12, 120)
INSERT INTO lend VALUES (15, 122)
INSERT INTO lend VALUES (17, 130)
SELECT * FROM lend
// 测试多表查询
SELECT book.name,  lend.reader_ID FROM book join lend ON book.ID=lend.book_ID
SELECT * FROM book join lend ON book.ID=lend.book_ID
SELECT * FROM book join lend ON book.ID<>lend.book_ID
SELECT * FROM book join lend ON book.ID=lend.book_ID Where book.ID<200
SELECT * FROM book join lend ON book.ID=lend.book_ID Where book.ID<200 &&
lend.reader_id > 13
SELECT * FROM book join lend ON book.ID=lend.book_ID Where book.ID<100 ||
book.ID>120
// 测试多条件on
SELECT * FROM book join lend ON book.ID<=lend.book_ID && book.ID>=lend.book_ID
SELECT * FROM book join lend ON book.ID<lend.book_ID || book.ID>lend.book_ID
SELECT * FROM book join lend ON book.ID<>lend.book_ID

// 表meta修改
alter table lend add date STRING
show table lend
alter table lend drop date
show table lend
alter table lend alter date INT
show table lend
alter table lend alter date STRING
show table lend
```