**1.database architecture**

Server - database - table view procedure function

Table - column data constraint(primary key | foreign key | not null | unique | default) index trigger

View - column

**2.SQL language**

1.database

①create database database\_name;

②show databases;

③use database\_name;

④alter database database\_name alter\_spec;

⑤drop database database\_name;

2.table

①create table table\_name (column type constraint );

②show tables;

③show create table table\_name;

④show columns from table\_name from database\_name; show columns from database\_name.table\_name;

⑤desc(describe) table\_name; desc(describe) table\_name column\_name;

⑥alter table table\_name alter\_spec;

⑦rename table table\_name1 to table\_name2;

⑧drop table table\_name;

3.view

①create view view\_name (column\_list) as select column\_list from table\_list;

②show create view view\_name;

③drop view view\_name;

4.insert

insert into table\_name (column\_list) values (value\_list);

5.update

update table\_name set column\_name=value where expression;

6.delete

delete from table\_name where expression;

7.select

①select \*/column\_list from table\_list/view\_list

where expression;

order by column\_name asc/desc;

group by column\_name;

having expression;

limit offset,row count;

②select \*/column\_list from table\_name1/view\_name1 inner join/left outer join/right outer join table\_name2/view\_name2 on expression;

③select expression1 union/union all select expression2;

8.index

①create [unique/fulltext/spatial] index index\_name on table\_name (col\_name[length]) [asc/desc];

②show index from table\_name;

③drop index index\_name on table\_name;

1.create database books;

2.grant all on \* to test\_one;

2.grant all on \* to test\_one identified by 'test\_one';

2.grant select, insert, update, delete, index, alter, create, drop on books.\* to bookadmin identified by '123';

3.update user set Password = PASSWORD('jiaqizhang') where User = 'test\_one';

4.delete from user where User = '';

5.mysql -u bookadmin -p -D books < ./bookorama.sql

6.mysqldump -u root -p --opt books > ./books\_sql\_backup.sql