

Homework5

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1.

```
mysql> create table user(  
    -> id int auto_increment primary key,  
    -> name varchar(100) not null,  
    -> sex enum('Female','Male') not null,  
    -> age int not null,  
    -> phone varchar(100) not null);  
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> desc user;  
+-----+-----+-----+-----+-----+-----+  
+  
| Field | Type                | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
+  
| id    | int                  | NO   | PRI | NULL    | auto_increment |  
| name  | varchar(100)         | NO   |     | NULL    |                |  
| sex   | enum('Female','Male') | NO   |     | NULL    |                |  
| age   | int                  | NO   |     | NULL    |                |  
| phone | varchar(100)         | NO   |     | NULL    |                |  
+-----+-----+-----+-----+-----+-----+  
+  
5 rows in set (0.00 sec)
```

```
mysql> INSERT INTO user (name, sex, age, phone) VALUES
-> ('John Doe', 'Male', 25, '123-456-7890'),
-> ('Jane Smith', 'Female', 31, '987-654-3210'),
-> ('Bob Johnson', 'Male', 22, '555-123-4567');
```

Query OK, 3 rows affected (0.03 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from user;
```

id	name	sex	age	phone
1	John Doe	Male	25	123-456-7890
2	Jane Smith	Female	31	987-654-3210
3	Bob Johnson	Male	22	555-123-4567

3 rows in set (0.00 sec)

2.

```
mysql> select * from user;
```

id	name	sex	age	phone
1	John Doe	Male	25	123-456-7890
2	Jane Smith	Female	31	987-654-3210
3	Bob Johnson	Male	22	555-123-4567

3 rows in set (0.01 sec)

```
mysql> select id,name,age from user
-> where age between 20 and 30;
```

id	name	age
1	John Doe	25
3	Bob Johnson	22

2 rows in set (0.00 sec)

3.

```
mysql> insert into user(name,sex,age,phone)
-> values('Yu chao yi','Male',19,'159-7031-4987'),
-> ('Yu shuai ge','Male',38,'199-9999-0000'),
-> ('Yu ling','Female',88,'123-7777-7777'),
-> ('Yu qing gao wa','Female',9,'144-5555-6666');
Query OK, 4 rows affected (0.01 sec)
Records: 4 Duplicates: 0 Warnings: 0
```

```
mysql> select * from user;
```

id	name	sex	age	phone
1	John Doe	Male	25	123-456-7890
2	Jane Smith	Female	31	987-654-3210
3	Bob Johnson	Male	22	555-123-4567
4	Yu chao yi	Male	20	159-7031-4987
5	Yu shuai ge	Male	29	199-9999-0000
6	Yu ling	Female	23	123-7777-7777
7	Yu qing gao wa	Female	25	144-5555-6666

```
7 rows in set (0.00 sec)
```

4.

```
mysql> select id,name,age from user
-> where (age between 20 and 30) and (name like 'Yu%')
-> order by
-> age desc;
```

id	name	age
5	Yu shuai ge	29
7	Yu qing gao wa	25
6	Yu ling	23
4	Yu chao yi	20

```
4 rows in set (0.00 sec)
```

5.

```
mysql> select avg(age) as '用户平均年龄' from user;
+-----+
| 用户平均年龄 |
+-----+
|          25.0000 |
+-----+
1 row in set (0.00 sec)
```

6.

```
mysql> create table team(
    -> id int primary key,
    -> teamName varchar(100) not null);
Query OK, 0 rows affected (0.04 sec)

mysql> create table score(
    -> id int primary key,
    -> score float,
    -> userid int not null,
    -> teamid int not null,
    -> foreign key(userid) references user(id),
    -> foreign key(teamid) references team(id));
Query OK, 0 rows affected (0.05 sec)
```

7.

```
mysql> insert into team(id,teamname)
-> values(1,'ECNU'),
-> (2,'SJTU'),
-> (3,'TJU');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> insert into score(id, score,userid,teamid)
-> values(1,92.8,1,2),
-> (2,93.4,2,3),
-> (3,98.1,3,3),
-> (4,99.9,4,2),
-> (5,60.8,5,1),
-> (6,60.3,6,1),
-> (7,60.1,7,1);
Query OK, 7 rows affected (0.01 sec)
Records: 7  Duplicates: 0  Warnings: 0
```

```
mysql> select  u.id,u.name,u.age,t.teamName,s.score
-> from user u
-> join score s
-> on
-> u.id=s.userid
-> join team t
-> on
-> t.id=s.teamid
-> where
-> u.age<25 and s.teamid=1;
+----+-----+-----+-----+-----+
| id | name   | age | teamName | score |
+----+-----+-----+-----+-----+
| 6  | Yu ling | 23  | ECNU     | 60.3  |
+----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

8.

```
mysql> select sum(coalesce(s.score,0)) as 'ECNU总分'
-> from score s
-> join team t
-> on
-> s.teamid=t.id
-> where
-> t.id=1;
+-----+
| ECNU总分 |
+-----+
| 181.1999969482422 |
+-----+
1 row in set (0.00 sec)
```

9.

```
mysql> delete from score
-> where id=4;
Query OK, 1 row affected (0.00 sec)

mysql> delete from user
-> where id=4;
Query OK, 1 row affected (0.00 sec)
```