# homework5

```
Total Create Database my_edu_database;

USE my_edu_database;

Create table user (
    id Int Unsigned Not Null auto_increment Primary Key,
    name Varchar (50) Not Null,
    sex Varchar (10) Not Null,
    age Int Not Null,
    phone Varchar (20) Not Null
);

Insert Into user Values(Null, 'John Doe', 'Male', 25, '123-456-7890');

Insert Into user Values(Null, 'Jane Smith', 'Female', 31, '987-654-3210');

Insert Into user Values(Null, 'Bob Johnson', 'Male', 22, '555-123-4567');
```

Output:

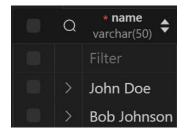
```
mysql> create database my_edu_database;
Query OK, 1 row affected (0.01 sec)
```

|   | Q | <b>* id</b><br>int unsigned <b>♦</b> | * name<br>varchar(50) | * sex varchar(10) | * age<br>int | * <b>phone</b><br>varchar(20) |
|---|---|--------------------------------------|-----------------------|-------------------|--------------|-------------------------------|
|   |   | Filter                               | Filter                | Filter            | Filter       | Filter                        |
|   | > | 1                                    | John Doe              | Male              | 25           | 123-456-7890                  |
|   | > | 2                                    | Jane Smith            | Female            | 31           | 987-654-3210                  |
|   | > | 3                                    | Bob Johnson           | Male              | 22           | 555-123-4567                  |
| ı | ′ | ,                                    | DOD JOHNSON           | iviaic            |              | 333 123 1301                  |

\_\_\_\_\_\_

```
5-2
SELECT name FROM user WHERE age >= 20 AND age <= 30;
```

Output:



\_\_\_\_\_\_

```
INSERT INTO user VALUES(null, "Zhicheng Xu", "Male", 20, "200-790-6677");
INSERT INTO user VALUES(NULL, 'Emily Xu', 'Female', 19, '234-567-8901');
INSERT INTO user VALUES(NULL, 'Michael Xu', 'Male', 17, '345-678-9012');
INSERT INTO user VALUES(NULL, 'Sophia Xu', 'Female', 22, '456-789-0123');
INSERT INTO user VALUES(NULL, 'Daniel Xu', 'Male', 35, '567-890-1234');
```

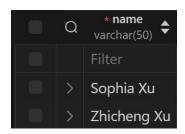
#### Output:

| Q | * id<br>int unsigned | * name varchar(50) | * sex varchar(10) | * age<br>int | * phone varchar(20) |
|---|----------------------|--------------------|-------------------|--------------|---------------------|
|   | Filter               | Filter             | Filter            | Filter       | Filter              |
|   | 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                    | Zhicheng Xu        | Male              | 20           | 200-790-6677        |
|   | 5                    | Emily Xu           | Female            | 19           | 234-567-8901        |
|   | 6                    | Michael Xu         | Male              | 17           | 345-678-9012        |
|   | 7                    | Sophia Xu          | Female            | 22           | 456-789-0123        |
| > | 8                    | Daniel Xu          | Male              | 35           | 567-890-1234        |

\_\_\_\_\_\_

```
5-4
SELECT name
FROM user
where age >= 20 and age <= 30 and name LIKE "%Xu"
ORDER BY age DESC;
```

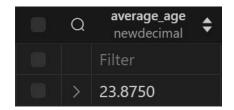
#### Output:



\_\_\_\_\_\_

```
5-5
SELECT AVG(age) AS average_age
FROM user;
```

### Output:



\_\_\_\_\_\_

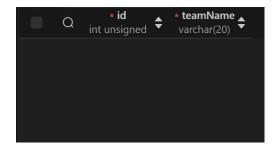
```
5-6
CREATE TABLE team(
id INT UNSIGNED NOT NULL auto_increment PRIMARY KEY,
teamName VARCHAR(20) NOT NULL
);

CREATE TABLE score(
id INT UNSIGNED NOT NULL auto_increment PRIMARY KEY,
teamid INT UNSIGNED NOT NULL,
userid INT UNSIGNED NOT NULL,
score INT NOT NULL,
FOREIGN KEY (teamid) REFERENCES team (id)ON UPDATE CASCADE ON DELETE CASCADE,
```

```
FOREIGN KEY (userid) REFERENCES user (id)ON DELETE CASCADE ON UPDATE CASCADE );
```

Output:

team:



score:

```
Q * id * 1 teamid int unsigned * 1 userid int unsigned in
```

\_\_\_\_\_\_

```
INSERT INTO team VALUES(NULL, "FDU");
INSERT INTO team VALUES(NULL, "MIT");
INSERT INTO team VALUES(NULL, "STJU");
INSERT INTO team VALUES(NULL, "ECNU");

INSERT INTO score values(NULL, 2, 7, 88);
INSERT INTO score values(NULL, 4, 4, 91);
INSERT INTO score values(NULL, 1, 1, 81);
INSERT INTO score values(NULL, 4, 5, NULL);
INSERT INTO score values(NULL, 1, 8, 97);
INSERT INTO score values(NULL, 4, 6, 83);
INSERT INTO score values(NULL, 3, 2, 96);
INSERT INTO score values(NULL, 3, 3, 87);
```

```
SELECT user.name

FROM user

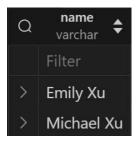
JOIN score ON user.id = score.userid

JOIN team ON score.teamid = team.id

WHERE team.teamName = 'ECNU' AND user.age < 20;
```

## Output:

| Q | <b>* id</b> | * <b>Teamid</b> int unsigned | * 🖰 userid 💠 | score tint |
|---|-------------|------------------------------|--------------|------------|
|   | Filter      | Filter                       | Filter       | Filter     |
| > | 1           | 2                            | 7            | 88         |
| > | 2           | 4                            | 4            | 91         |
| > | 3           | 1                            | 1            | 81         |
| > | 4           | 4                            | 5            | (NULL)     |
| > | 5           | 1                            | 8            | 97         |
| > | 6           | 4                            | 6            | 83         |
| > | 7           | 3                            | 2            | 96         |
| > | 8           | 3                            | 3            | 87         |



\_\_\_\_\_\_

```
5-8
SELECT SUM(score.score) AS sum_of_ECNU
FROM score
JOIN team ON score.teamid = team.id
WHERE team.teamName = 'ECNU';
```

### Output:



\_\_\_\_\_\_

```
5-9
DELETE FROM user
WHERE user.name = 'Zhicheng Xu';
```

# Output:

|   | Q | <b>* id</b> | * name<br>varchar(50) | * sex varchar(10) | * age<br>int • | * phone varchar(20) |
|---|---|-------------|-----------------------|-------------------|----------------|---------------------|
|   |   | Filter      | Filter                | Filter            | Filter         | Filter              |
|   | > | 1           | John Doe              | Male              | 25             | 123-456-7890        |
|   | > | 2           | Jane Smith            | Female            | 31             | 987-654-3210        |
|   | > | 3           | Bob Johnson           | Male              | 22             | 555-123-4567        |
|   | > | 5           | Emily Xu              | Female            | 19             | 234-567-8901        |
|   | > | 6           | Michael Xu            | Male              | 17             | 345-678-9012        |
|   | > | 7           | Sophia Xu             | Female            | 22             | 456-789-0123        |
| 0 | > | 8           | Daniel Xu             | Male              | 35             | 567-890-1234        |