

1.

```
1 • CREATE DATABASE IF NOT EXISTS homework8;
2 • USE homework8;
3 • CREATE TABLE IF NOT EXISTS users(
4     id INT AUTO_INCREMENT PRIMARY KEY,
5     name VARCHAR(20),
6     sex VARCHAR(20),
7     age INT,
8     phone VARCHAR(20)
9 );
10 • INSERT INTO homework8.users(name, sex, age, phone)
11 VALUES
12     ('John Doe', 'Male', 25, '123-456-7890'),
13     ('Jane Smith', 'Female', 31, '987-654-3210'),
14     ('Bob Johnson', 'Male', 22, '555-123-4567');
```

2.

```
1 • SELECT *
2 FROM homework8.users
3 WHERE age BETWEEN 20 AND 30;
```

	id	name	sex	age	phone
▶	1	John Doe	Male	25	123-456-7890
	3	Bob Johnson	Male	22	555-123-4567
*	NULL	NULL	NULL	NULL	NULL

3.

```
1 • INSERT INTO homework8.users(name, sex, age, phone)
2 VALUES
3     ('Hanwen_Ruan', 'male', 19, '133-233-1230'),
4     ('Zihe_Ruan', 'female', 18, '114-514-1919'),
5     ('Xining_Ruan', 'female', 25, '132-231-3213');
```

	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	Hanwen_Ruan	male	19	133-233-1230
	5	Zihe_Ruan	female	18	114-514-1919
	6	Xining_Ruan	female	25	132-231-3213
*	NULL	NULL	NULL	NULL	NULL

4.

```
1 • SELECT *
2 FROM homework8.users
3 WHERE age BETWEEN 20 AND 30 AND name LIKE '%Ruan'
4 ORDER BY age DESC;
```

	id	name	sex	age	phone
▶	6	Xining_Ruan	female	25	132-231-3213
*	NULL	NULL	NULL	NULL	NULL

5.

```
1 • SELECT AVG(age)
2 FROM homework8.users;
```

	AVG(age)
▶	23.3333

6.

```
1 USE homework8;
2 • CREATE TABLE IF NOT EXISTS team(
3     id INT AUTO_INCREMENT PRIMARY KEY,
4     teamName VARCHAR(20)
5 );
6 • CREATE TABLE IF NOT EXISTS score(
7     id INT AUTO_INCREMENT PRIMARY KEY,
8     teamid INT,
9     userid INT,
10    score INT,
11    CONSTRAINT fk_team
12    FOREIGN KEY(teamid) REFERENCES team(id),
13    CONSTRAINT fk_user
14    FOREIGN KEY(userid) REFERENCES users(id)
15 );
```

7.

```
1 • INSERT INTO team(teamName)
2 VALUES
3     ('ECNU'),
4     ('JY');
5 • INSERT INTO score(teamid, userid, score)
6 VALUES
7     (1, 1, 89),
8     (1, 2, 93),
9     (2, 3, 78),
10    (1, 4, 99),
11    (2, 5, 86),
12    (2, 6, 83);
```

```

1 • SELECT u.name, t.teamName, u.age
2 FROM users AS u
3 JOIN team AS t
4 JOIN score AS s ON u.id = s.userid AND u.age < 20 AND t.id = s.teamid AND t.teamName = 'ECNU';

```

	name	teamName	age
▶	Hanwen_Ruan	ECNU	19

8.

```

1 • SELECT SUM(score)
2 FROM users AS u
3 JOIN score AS s
4 JOIN team AS t ON s.teamid = t.id AND t.teamName = 'ECNU' AND u.id = s.userid;

```

	SUM(score)
▶	281

9.

```

1 • SET FOREIGN_KEY_CHECKS = 0;
2 • DELETE FROM users
3 WHERE id = 4;

```

	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
	5	Zihe_Ruan	female	18	114-514-1919
	6	Xining_Ruan	female	25	132-231-3213