

Q1:

```
mysql> CREATE DATABASE homework;  
Query OK, 1 row affected (0.01 sec)
```

→ 创立数据库

```
mysql> USE homework;  
Database changed
```

→ 使用数据库

```
mysql> CREATE TABLE user (  
-> id SERIAL PRIMARY KEY,  
-> name VARCHAR(255),  
-> sex VARCHAR(10),  
-> age INT,  
-> phone VARCHAR(20)  
-> );
```

} 创立 user 表格

```
Query OK, 0 rows affected (0.03 sec)
```

插入数据

```
mysql> INSERT INTO user (name, sex, age, phone) VALUES ('John Doe', 'Male', 25, '123-456-7890');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO user (name, sex, age, phone) VALUES ('Jane Smith', 'Female', 31, '987-654-3210');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO user (name, sex, age, phone) VALUES ('Bob Johnson', 'Male', 22, '555-123-4567');  
Query OK, 1 row affected (0.02 sec)
```

```
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

结果展示

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

Q2:

```
mysql> SELECT * FROM user 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

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

筛选结果

Q3:

```
mysql> INSERT INTO user (name, sex, age, phone) VALUES ('MAO meme', 'Female', 48, '10086');  
Query OK, 1 row affected (0.00 sec)
```

(后面改掉了...)

```
mysql> SELEEECT * FROM user;
```

```
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the error near 'SELEEECT * FROM user' at line 1
```

```
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	MAO meme	Female	48	10086

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

```
mysql> INSERT INTO user (name, sex, age, phone) VALUES ('MAO feifei', 'Female', 24, '1652');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO user (name, sex, age, phone) VALUES ('MAO mingming', 'Male', 28, '2626');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO user (name, sex, age, phone) VALUES ('MAO yanyan', 'Female', 26, '1164');
Query OK, 1 row affected (0.02 sec)

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  | MAO meme  | Female | 20   | 10086        |
| 5  | MAO feifei | Female | 24   | 1652         |
| 6  | MAO mingming | Male  | 28   | 2626         |
| 7  | MAO yanyan | Female | 26   | 1164         |
+----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

} 新添加的.

Q4:

```
mysql> SELECT * FROM user WHERE age BETWEEN 20 AND 30 AND name LIKE 'MAO' ORDER BY age DESC;
Empty set (0.00 sec)

mysql> SELECT * FROM user WHERE age BETWEEN 20 AND 30 AND name LIKE '%MAO%' ORDER BY age DESC;
+----+-----+-----+-----+-----+
| id | name      | sex   | age  | phone      |
+----+-----+-----+-----+-----+
| 6  | MAO mingming | Male  | 28   | 2626        |
| 7  | MAO yanyan  | Female | 26   | 1164        |
| 5  | MAO feifei  | Female | 24   | 1652        |
| 4  | MAO meme    | Female | 20   | 10086       |
+----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

排好序结果

Q5:

```
mysql> SELECT AVG(age) FROM user;
+-----+
| AVG(age) |
+-----+
| 25.1429  |
+-----+
1 row in set (0.00 sec)
```

Q6:

先建立 team 表

```
mysql> CREATE TABLE team (
    ->     id SERIAL PRIMARY KEY,
    ->     teamName VARCHAR(255)
    -> );
Query OK, 0 rows affected (0.01 sec)
```


再建立 score 表 (设立好外键)

```
mysql> CREATE TABLE score (  
-> id SERIAL PRIMARY KEY,  
-> teamid BIGINT UNSIGNED NOT NULL,  
-> userid BIGINT UNSIGNED NOT NULL,  
-> score INT,  
-> FOREIGN KEY (teamid) REFERENCES team(id),  
-> FOREIGN KEY (userid) REFERENCES user(id)  
-> );  
Query OK, 0 rows affected (0.01 sec)
```

Q7:

先插入一些数据

```
mysql> INSERT INTO team (teamName) VALUES  
-> ('ECNU'),  
-> ('Team A'),  
-> ('Team B'),  
-> ('Team C');  
Query OK, 4 rows affected (0.00 sec)  
Records: 4 Duplicates: 0 Warnings: 0  
  
mysql> INSERT INTO user (name, sex, age, phone) VALUES  
-> ('Flipped', 'Female', 19, '12306');  
Query OK, 1 row affected (0.00 sec)  
  
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 | MAO meme      | Female| 20   | 10086           |  
| 5 | MAO feifei    | Female| 24   | 1652            |  
| 6 | MAO mingming  | Male  | 28   | 2626            |  
| 7 | MAO yanyan    | Female| 26   | 1164            |  
| 8 | Flipped       | Female| 19   | 12306           |  
+-----+-----+-----+-----+-----+  
8 rows in set (0.00 sec)  
  
mysql> INSERT INTO score (teamid, userid, score) VALUES  
-> (1, 8, 85), -- Flipped 在团队 ECNU 的得分  
-> (2, 1, 90), -- John Doe 在团队 Team A 的得分  
-> (3, 2, 75), -- Jane Smith 在团队 Team B 的得分  
-> (1, 3, 88); -- Bob Johnson 在团队 ECNU 的得分  
Query OK, 4 rows affected (0.01 sec)  
Records: 4 Duplicates: 0 Warnings: 0  
  
mysql> SELECT * FROM score;  
+-----+-----+-----+-----+  
| id | teamid | userid | score |  
+-----+-----+-----+-----+  
| 1 | 1      | 8      | 85    |  
| 2 | 2      | 1      | 90    |  
| 3 | 3      | 2      | 75    |  
| 4 | 1      | 3      | 88    |  
+-----+-----+-----+-----+  
4 rows in set (0.00 sec)
```

查询结果:

```
mysql> SELECT u.*
-> FROM user u
-> JOIN score s ON u.id = s.userid
-> JOIN team t ON s.teamid = t.id
-> WHERE t.teamName = 'ECNU' AND u.age < 20;
+-----+-----+-----+-----+
| id | name      | sex   | age  | phone |
+-----+-----+-----+-----+
| 8  | Flipped  | Female | 19   | 12306 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

Q8: (这里是两个人加起来 85+88)

```
mysql> SELECT COALESCE(SUM(s.score), 0) AS total_score
-> FROM score s
-> JOIN team t ON s.teamid = t.id
-> WHERE t.teamName = 'ECNU';
+-----+
| total_score |
+-----+
|          173 |
+-----+
1 row in set (0.00 sec)
```

Q9:

```
mysql> DELETE FROM user;
ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails ('homework`.`score`, CO
'score_ibfk_2' FOREIGN KEY ('userid') REFERENCES 'user' ('id'))
mysql> DELETE FROM score WHERE userid IN (SELECT id FROM user);
Query OK, 4 rows affected (0.00 sec)

mysql> DELETE FROM user;
Query OK, 8 rows affected (0.00 sec)

mysql> SELECT * FROM user
-> SELECT * FROM user;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server
for the right syntax to use near 'SELECT * FROM user' at line 2
mysql> SELECT * FROM user;
Empty set (0.00 sec)
mysql> |
```