

### 第一题:

```
mysql> USE Homework;
Database changed
mysql> CREATE TABLE users(
  -> id INT AUTO_INCREMENT PRIMARY KEY,
  -> name VARCHAR(50) NOT NULL,
  -> sex  VARCHAR(50) NOT NULL,
  -> age INT,
  -> phone VARCHAR(50)
  -> );
Query OK, 0 rows affected (0.04 sec)

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

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

mysql> INSERT INTO users(name,sex,age,phone)
  -> VALUES ('Bob Johnson', 'Male', 22, '555-123-4567');
Query OK, 1 row affected (0.00 sec)
```

### 第二题:

```
mysql> SELECT * FROM users WHERE age>=20 AND age<=30;
+----+-----+-----+-----+-----+
| id | name      | sex   | age  | phone      |
+----+-----+-----+-----+-----+
| 1  | John Doe  | Male  | 25   | 123-456-7890 |
| 3  | Bob Johnson | Male  | 22   | 555-123-4567 |
+----+-----+-----+-----+-----+
```

### 第三题:

```
mysql> INSERT INTO users
  -> VALUES(NULL, 'Caolu', 'Female', 20, '188-628-54398');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO users
  -> VALUES
  -> (NULL, 'Caolulu', 'Female', 22, '158-628-54398'),
  -> (NULL, 'Caoxiaolu', 'Female', 21, '123-456-789'),
  -> (NULL, 'Caodalul', 'Female', 23, '789-456-123');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

### 第四题:

```
mysql> SELECT * FROM users WHERE age >=20 AND age <=30 AND name LIKE 'Cao%' ORDER BY age DESC;
+----+-----+-----+-----+-----+
| id | name      | sex   | age  | phone      |
+----+-----+-----+-----+-----+
| 7  | Caodalul | Female | 23   | 789-456-123 |
| 5  | Caolulu  | Female | 22   | 158-628-54398 |
| 6  | Caoxiaolu | Female | 21   | 123-456-789 |
| 4  | Caolu     | Female | 20   | 188-628-54398 |
+----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

### 第五题:

```
mysql> SELECT ROUND(AVG(age), 2) AS average_age FROM users;
+-----+
| average_age |
+-----+
| 23.43       |
+-----+
1 row in set (0.00 sec)
```

### 第六题:

```
mysql> CREATE TABLE team (
  ->   id INT AUTO_INCREMENT PRIMARY KEY,
  ->   teamName VARCHAR(50) NOT NULL
  -> );
Query OK, 0 rows affected (0.05 sec)

mysql> CREATE TABLE score(
  -> id INT AUTO_INCREMENT PRIMARY KEY,
  -> teamid INT,
  -> userid INT,
  -> FOREIGN KEY (teamid) REFERENCES team(id),
  -> FOREIGN KEY (userid) REFERENCES users(id)
  -> );
Query OK, 0 rows affected (0.02 sec)

mysql> ALTER TABLE score
  -> ADD score INT;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

### 第七题:

```
mysql> INSERT INTO team (teamName)
  -> VALUES
  ->   ('ECNU'),
  ->   ('SJU'),
  ->   ('FDU'),
  ->   ('TJU');
Query OK, 4 rows affected (0.00 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> INSERT INTO score(teamid,userid,score)
  -> VALUES
  -> (1,1,90),
  -> (2,2,91),
  -> (3,3,92),
  -> (1,4,100),
  -> (4,5,93),
  -> (2,6,94),
  -> (3,7,95),
  -> (1,8,96),
  -> (1,9,98);
Query OK, 9 rows affected (0.00 sec)
Records: 9 Duplicates: 0 Warnings: 0

mysql> SELECT u.id, u.name, u.age, t.teamName, s.score
  -> FROM users 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   | age  | teamName | score |
+----+-----+-----+-----+-----+
|  8 | xiaoming | 19  | ECNU    | 96    |
|  9 | xiaozhang | 18  | ECNU    | 98    |
+----+-----+-----+-----+-----+
2 rows in set (0.03 sec)
```

### 第八题:

```
mysql> SELECT SUM(COALESCE(s.score, 0)) AS total_score
  -> FROM score s
  -> JOIN team t ON s.teamid = t.id
  -> WHERE t.teamName = 'ECNU';
+-----+
| total_score |
+-----+
|          384 |
+-----+
1 row in set (0.02 sec)
```

第九题:

```
| score | CREATE TABLE `score` (  
|   `id` int NOT NULL AUTO_INCREMENT,  
|   `teamid` int DEFAULT NULL,  
|   `userid` int DEFAULT NULL,  
|   `score` int DEFAULT NULL,  
| PRIMARY KEY (`id`),  
| KEY `teamid` (`teamid`),  
| KEY `userid` (`userid`),  
| CONSTRAINT `score_ibfk_1` FOREIGN KEY (`teamid`) REFERENCES `team` (`id`),  
| CONSTRAINT `score_ibfk_2` FOREIGN KEY (`userid`) REFERENCES `users` (`id`)  
| ) ENGINE=InnoDB AUTO_INCREMENT=10 DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |  
+-----+  
-----  
  
-----+  
1 row in set (0.01 sec)
```

```
mysql> ALTER TABLE score  
-> DROP FOREIGN KEY score_ibfk_1,score_ibfk_2;  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL  
server version for the right syntax to use near 'score_ibfk_2' at line 2  
mysql> ALTER TABLE score  
-> DROP FOREIGN KEY score_ibfk_1;  
Query OK, 0 rows affected (0.03 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE score  
-> DROP FOREIGN KEY score_ibfk_2;  
Query OK, 0 rows affected (0.01 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> TRUNCATE TABLE users;  
Query OK, 0 rows affected (0.02 sec)
```