# 第五周实验

# 1. 建立计算机学院总评不及格成绩学生的视图,包括学生学号、姓名、性别、手机、所选择课程和成绩。

### 首先先检索出相应的学生信息:

```
select s.student_id,s.student_name,s.gender,s.phone_number, c.class_name,
sc.score
from student s
join select_class sc on s.student_id = sc.student_id
join class c on sc.class_id = c.class_id
where s.yxh='01' and sc.score < 60;</pre>
```

### 检索的结果:

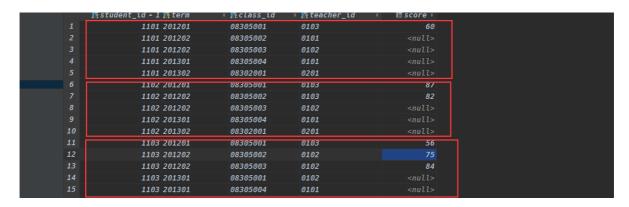
### 建立视图:

```
create view failed_01 as
select s.student_id,s.student_name,s.gender,s.phone_number, c.class_name,
sc.score
from student s
join select_class sc on s.student_id = sc.student_id
join class c on sc.class_id = c.class_id
where s.yxh='01' and sc.score < 60;</pre>
```

# 2. 在选课表中插入记录,把每一个学生没有学过的课程都插入到选课表中,使得每一个学生都选修每门课程。

## 代码:

### 结果:



从上面图示中,我们可以很清楚的看到所有的学生选课的个数都是五。

#### 第二种方案:

```
insert into select_class(student_id, term, class_id, teacher_id, score)
select s.student_id, oc.term, oc.class_id, oc.term, oc.teacher_id
from student s
join open_class oc
where (s.student_id, oc.class_id) not in (select select_class.student_id, select_class.class_id from select_class)
group by s.student_id,oc.class_id;
```

# 3. 检索出年龄大于所有女同学年龄的男学生的姓名和年龄

## 代码:

```
1 select *
2 from student
3 where gender='男' and birthday < (select min(birthday)
4 from student
5 where gender='女');
```

### 执行结果:

# 4. 在选课表中修改08305001课程的平时成绩,如果成绩小于75分的话提高5%,如果成绩大于75分提高4%

#### 代码:

```
1 -- 如果成绩小于等于75分的时候提高成绩5%
2 update select_class set score=score*105/100 where score <= 75 and class_id ='08305001';
3 -- 如果成绩大于75岁就提高4%
5 update select_class set score=score*104/100 where score > 75 and class_id = '08305001';
```

#### 执行结果:

```
🖪 student_id : 🚂 term
                        : 📭 class_id
                                      : 📭 teacher_id
                                                          I≣ score ÷
       1101 201201 08305001
                                     0103
                                                                63
       1102 201201
                       08305001
                                      0103
                                                                90
                        08305002
       1102 201202
                                       0103
                                                                82
                        08305001
        1103 201201
                                       0103
                                                                59
        1103 201202
                         08305002
                                       0102
        1103 201202
                         08305003
                                        0102
                        08305001
        1104 201201
                                       0103
                                                                81
        1106 201201
                        08305001
                                       0103
                                                                88
        1106 201202
                        08305002
                                      0103
                                                                66
        1107 201201
                         08305001
                                       0103
                                                                94
        1107 201202
                         08305003
                                       0102
                                                                79
```

# 5. 删除没有开课的学院

### 代码:

```
1 -- 修改外键的属性
   ALTER TABLE student add constraint fk_student_yxh FOREIGN KEY (yxh)
    references department(yxh) on update cascade on delete set null;
    ALTER TABLE teacher add constraint fk_tearcher_yxh FOREIGN KEY (yxh)
    references department(yxh) on update cascade on delete set null;
    ALTER TABLE class add constraint fk_class_yxh FOREIGN KEY (yxh) references
    department(yxh) on update cascade on delete cascade ;
    -- 进行修改
   delete from department
6
    where yxh not in (
8
        select distinct class.yxh
9
        from class
10
        join open_class oc on class.class_id = oc.class_id
11
        group by class.class_id);
```

# 执行结果:

# 6. 查询优、良、中、及格、不及格学生的个数

### 方案一:

```
select Evaluation, count(*) as Total
 2
    from (
 3
        select score,
4
        case
 5
            when score < 60 and score >= 0 then '不及格'
            when score >= 60 and score < 70 then '及格'
 6
7
            when score >= 70 and score < 80 then '中'
            when score >= 80 and score < 90 then '良'
8
9
            when score >= 90 and score < 100 then '优'
        else '无成绩' end as Evaluation
10
11
        from select_class
12
    ) TEMP_TABLE
```

```
13 group by Evaluation
14 ORDER BY FIELD(Evaluation,
15 '优',
16 '良',
17 '中',
18 '及格',
19 '不及格',
20 '无成绩');
```

## 执行结果:

## 方案二:

```
select
(select count(*) from select_class where score >= 90) '优',
(select count(*) from select_class where score < 90 and score >= 80) '良',
(select count(*) from select_class where score < 80 and score >= 70) '中',
(select count(*) from select_class where score < 70 and score >= 60) '及
格',
(select count(*) from select_class where score < 60 and score >= 0) '不及
格',
(select count(*) from select_class where score is null) '无成绩';
```

# 执行结果: