

练习题需要的数据如下：

Student 表格

| SSN        | SNAME        | GPA  | AGE | DEPTNO |
|------------|--------------|------|-----|--------|
| 2007001003 | CHENGLICHONG | 3.33 | 20  | 31     |
| 2007001005 | ZHONGWEILONG | 3.62 | 20  | 33     |
| 2007001006 | WUYUANLANG   | 4.01 | 20  | 33     |
| 2006001001 | LUOZI        | 3.12 | 20  | 34     |
| 2006001002 | GUOHUAXIAN   | 3.21 | 21  | 34     |
| 2006001004 | LELINGBING   | 3.75 | 21  |        |
| 2007002001 | ZHUJIANGUO   | 3.05 | 19  |        |

Course 表：

| CNO | CNAME                | CREDIT |
|-----|----------------------|--------|
| 001 | Math                 | 3      |
| 002 | Multimedia           | 3      |
| 003 | Computer network     | 4      |
| 004 | Software engineering | 4      |
| 005 | Bioinformatics       | 3      |

SC 表：

Figure 3.11 SC

| SSN        | CNO | GRADE |
|------------|-----|-------|
| 2007001003 | 001 | 78    |
| 2007001003 | 002 | 67    |
| 2007001003 | 003 | 89    |
| 2007001003 | 004 | 65    |
| 2007001005 | 001 | 75    |
| 2007001005 | 002 | 90    |
| 2007001006 | 002 | 80    |
| 2006001001 | 002 | 70    |
| 2006001001 | 004 | 90    |

学号:

姓名:

1. Select the number and the total grade of the students whose total grade is more than 200.

```
Select sno, sum(grade) from sc
group by sno
having sum(grade)>200
```

2. Select the courses that were selected by none students. List the courses' NO. and names.

```
Select c.cno,cname
from course c left join sc on c.cno=sc.cno where sc.cno is null
```

2. Select the courses that were selected by none students. List the courses' NO. and names.

```
SELECT CNO , CNAME
FROM COURSE
WHERE NOT EXISTS
( SELECT *
  FROM SC
  WHERE CNO= COURSE.CNO );
```

```
SELECT CNO , CNAME
FROM Course
WHERE CNO NOT IN
( SELECT DISTINCT CNO
  FROM SC )
```

3. Select the names, courses NO. and grade of the students whose grade is more than 80. Show the result by descendent order on grade.

Select sname,cno,grade

From student,sc

Where student.ssn=sc.ssn

And grade >80

Order by grade desc

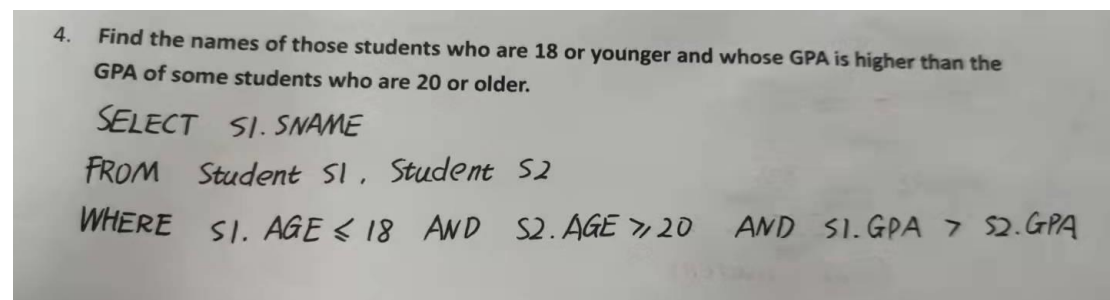
4. Find the names of those students who are 18 or younger and whose GPA is higher than the GPA of some students who are 20 or older.

select sName from Student

where Age <= 18 and GPA >some

(select GPA from Student

where Age >= 20)



5. Find the names and age of students in **other** departments that have smaller age than **any** a student in the department 33.

SELECT Sname, Sage

FROM Student

WHERE Sage < ANY (SELECT Sage

FROM Student

WHERE deptid= ' 33 ')

AND deptid <> ' 33 ' ;

6. Find the names of all students who study in the same department with a student with sname= 'liucheng' .

SELECT ssn, Sname, DEPTNO

FROM Student S1

WHERE EXISTS

```
SELECT *  
FROM Student S2  
WHERE S2.DEPTNO = S1.DEPTNO AND  
S2.Sname = 'liucheng';
```

6. Find the names of all students who study in the same department with a student sname= 'liucheng'.

```
SELECT S1.SNAME  
FROM Student S1  
WHERE S1.DEPTNO =  
(SELECT S2.DEPTNO  
FROM Student S2  
WHERE S2.SNAME = 'liucheng');
```

7. Find all the students who take all courses

```
select * from Student s  
where not exists  
(select * from Course c  
where not exists  
(select * from sc  
where ssn= s.ssn  
and Cno = c.Cno))
```

Find all the students who take all courses

```
SELECT SC.SSN  
FROM SC  
GROUP BY SC.SSN  
HAVING COUNT(*) = (SELECT COUNT(Course.CNO)  
FROM Course);
```

8. For students in department 33, please set the grades of their courses to 0.

Update SC  
Set Grade=0  
Where SSN In  
(Select SSN  
From Student  
Where DEPTNO=33)

8. For students in department 33, please set the grades of their courses to 0.

```
UPDATE SC, Student
SET GRADE = 0
WHERE Student.SSN = SC.SSN AND Student.DEPTNO = 33;
```