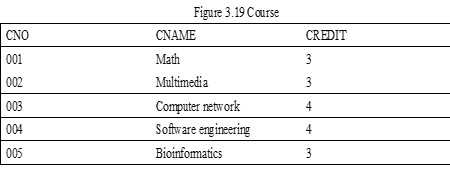
练习题需要的数据如下：

Student 表格



Course表：



SC表：



**学号： 姓名：**

1. **Find all pairs of students who have the same GPA.**

**select s1.SSN, s2.SSN**

**from Students s1, Students s2**

**where s1.GPA = s2.GPA**

**and s1.SSN < s2.SSN**

1. **Find the names of all students whose GPA is higher than LUOZI 's GPA.**

select s1.SNAME

from Student s1, Student s2

where s2.SNAME = ‘LUOZI'

and s1.GPA > s2.GPA

1. Select the number of students and the best grade of each course.

Select cno,count(\*),max(grade)

From sc

Group by cno

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**

1. 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

1. 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

1. **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)

1. 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 ' ;

1. **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 '；

1. **Find the names and GPAs of those students who take all courses taken by a student with SID = 2006002001.**

select Name, GPA from Student s

where not exists

(select \* from Course c

where Cno in

(select Cno from sc

where ssn= 2006002001) and not exists

(select \* from sc e

where ssn=e.ssn and Cno =

c.Cno))

SELECT Name, GPA

FROM student SX

WHERE NOT EXISTS

(SELECT \*

FROM SC SCY

WHERE SCY.Ssn = 2006002001 AND

NOT EXISTS

(SELECT \*

FROM SC SCZ

WHERE SCZ.Ssn=SX.Ssn AND

SCZ.Cno=SCY.Cno))；

阅读课本71页，第6题，用关系代数完成如下查询

（3）求供应工程J1零件为红色的供应商号码SNO

（5）求至少用了供应商S1所供应的全部零件的工程号JNO。

