1.

ALTER TABLE Student

ADD Nation VarCHAR(20);

2.

ALTER TABLE Student

DROP COLUMN Nation;

3.

INSERT INTO Grade

VALUES('2001110','3',null);

4.

UPDATE Grade

SET Gmark =70

WHERE Sno = '2001110';

5.

DELETE FROM Grade

WHERE Sno = '2001110';

6.

CREATE INDEX IX\_Class

ON Student(Clno);

7.

DROP INDEX IX\_Class ON Student;

-- 第二题

select distinct Cno from Grade;

select COUNT(\*) from Student where Clno = (select Clno from Student where Sname = '李勇');

select avg(Gmark) as '平均成绩',max(Gmark) as '最高分',min(Gmark) as '最低分' from Grade where Cno = (select Cno from Course where Cname = '操作系统');

SELECT

Sname

FROM

Student

WHERE

Clno IN ( SELECT Clno FROM Class WHERE Speciality = '计算机软件' AND Inyear = '2000' )

AND

Sno IN ( SELECT Sno FROM Grade WHERE Gmark IS NULL );

-- 第三题

-- 找出与李勇在同一个班的学生信息；

select \* from Student where Sname <> '李勇' and Clno in (select Clno from Student where Sname = '李勇');

-- 找出所有与学生李勇有相同选修课程的学生信息;

SELECT

\*

FROM

Student

WHERE

Sname <> '李勇'

AND EXISTS (

SELECT

\*

FROM

Grade

WHERE

Student.Sno = Grade.Sno

AND Grade.Cno IN ( SELECT Cno FROM Grade g, Student s WHERE g.Sno = s.Sno AND s.Sname = '李勇' ));

-- 找出选修了操作系统的学生学号和姓名；

SELECT

Sno,

Sname

FROM

Student

WHERE

Sno IN (

SELECT

Sno

FROM

Grade

WHERE

Cno = ( SELECT Cno FROM Course WHERE Cname = '操作系统' ));

-- 找出没有选修1号课程的所有学生姓名。

select Sname from Student where Sno not in (select Sno from Grade where Student.Sno = Grade.Sno and Cno = 1);

select Sname from Student where not EXISTS (select \* from Grade where Student.Sno = Grade.Sno and Cno = 1);

-- 第四题

select Sno,Gmark from Grade where Cno = 3 order by Gmark desc;

SELECT

Cno AS '课程号',

COUNT( Cno ) AS '选课人数'

FROM

Grade

GROUP BY

Cno;

-- 或者

SELECT

c.Cno as '课程号',

COUNT(g.sno) AS '选课人数'

FROM

Course c

LEFT JOIN Grade g ON c.Cno = g.Cno

GROUP BY

c.Cno;

-- 第五题

-- 将01311班的全体学生的成绩置0；

update Grade set Gmark = 0 where Sno in (select Sno from Student where Clno = '01311');

-- 删除2001级计算机软件的全体学生的选课记录。

DELETE

FROM

Grade

WHERE

Sno IN (

SELECT

Sno

FROM

Student

WHERE

Clno IN ( SELECT Clno FROM Class WHERE Speciality = '计算机软件' and Inyear = '2001'));