create table students

(sno varchar(3) not null,

sname varchar(4) not null,

ssex varchar(2) not null,

sbirthday datetime,

class varchar(5))

create table courses

(cno varchar(5) not null,

cname varchar(10) not null,

tno varchar(10) not null)

create table scores

(sno varchar(3) not null,

cno varchar(5) not null,

degree int not null)

create table teachers

(tno varchar(3) not null,

tname varchar(4) not null, tsex varchar(2) not null,

tbirthday datetime not null, prof varchar(6),

depart varchar(10) not null)

insert into students(sno,sname,ssex,sbirthday,cl s) values (108 ,'曾华' ,'男' ,'1977-09-01',95033);

insert into students(sno,sname,ssex,sbirthday,cl s) values (105 ,'匡明' ,'男' ,'1975-10-02',95031);

insert into students(sno,sname,ssex,sbirthday,cl s) values (107 ,'王丽' ,'女' ,'1976-01-23',95033);

insert into students(sno,sname,ssex,sbirthday,cl s) values (101 ,'李军' ,'男' ,'1976-02-20',95033);

insert into students(sno,sname,ssex,sbirthday,cl s) values (109 ,'王芳' ,'女' ,'1975-02-10',95031);

insert into students(sno,sname,ssex,sbirthday,cl s) values (103 ,'陆君' ,'男' ,'1974-06-03',95031);

insert into courses(cno,cname,tno)values ('3-105' ,'计算机导论',825);

insert into courses(cno,cname,tno)values ('3-245' ,'操作系统' ,804);

insert into courses(cno,cname,tno)values ('6-166' ,'数据电路' ,856);

insert into courses(cno,cname,tno)values ('9-888' ,'高等数学' ,100);

insert into scores (sno,cno,degree)values (103,'3-245',86);

insert into scores (sno,cno,degree)values (105,'3-245',75);

insert into scores (sno,cno,degree)values (109,'3-245',68);

insert into scores (sno,cno,degree)values (103,'3-105',92);

insert into scores (sno,cno,degree)values (105,'3-105',88);

insert into scores (sno,cno,degree)values (109,'3-105',76);

insert into scores (sno,cno,degree)values (101,'3-105',64);

insert into scores (sno,cno,degree)values (107,'3-105',91);

insert into scores (sno,cno,degree)values (108,'3-105',78);

insert into scores (sno,cno,degree)values (101,'6-166',85);

insert into scores (sno,cno,degree)values (107,'6-106',79);

insert into scores (sno,cno,degree)values (108,'6-166',81);

insert into teachers (tno,tname,tsex,tbirthday,prof,depart) values (804,'李诚','男','1958-12-02','副教授','计算机系');

insert into teachers (tno,tname,tsex,tbirthday,prof,depart) values (856,'张旭','男','1969-03-12','讲师','电子工程系');

insert into teachers (tno,tname,tsex,tbirthday,prof,depart) values (825,'王萍','女','1972-05-05','助教','计算机系');

insert into teachers (tno,tname,tsex,tbirthday,prof,depart) values (831,'刘冰','女','1977-08-14','助教','电子工程系');

1、 查询student表中的所有记录的sname、ssex和class列。

select sname,ssex,class from students;

2、 查询教师所有的单位即不重复的depart列。

select distinct depart from teachers;

3、 查询student表的所有记录。

select \* from students;

4、 查询score表中成绩在60到80之间的所有记录。

select \* from scores where degree between 60 and 80;

5、 查询score表中成绩为85，86或88的记录。

select \* from scores where degree in(85,86,88);

6、 查询student表中“95031”班或性别为“女”的同学记录。

select \* from students where class = '95031' or ssex = '女';

7、 以class降序查询student表的所有记录。

select \* from students order by class desc;

8、 以cno升序、degree降序查询score表的所有记录。

select \* from scores order by cno asc,degree desc;

9、 查询“95031”班的学生人数。

select count(\*) 人数 from students where class = '95031';

10、查询score表中的最高分的学生学号和课程号。

select sno,cno,degree from scores where degree = (select max(degree) from scores);

11、查询‘3-105’号课程的平均分。

select avg(degree) from scores where cno = '3-105';

12、查询score表中至少有5名学生选修的并以3开头的课程的平均分数。

select avg(degree) from scores where cno like '3%' group by cno having count(cno)>=5;

13、查询最低分大于70，最高分小于90的sno列。

select sno from scores group by sno having min(degree)>70 and max(degree)<90;

14、查询所有学生的sname、cno和degree列。

select sname,cno,degree from students join scores on students.sno=scores.sno;

15、查询所有学生的sno、cname和degree列。

select sno,cname,degree from scores join courses on scores.cno=courses.cno;

16、查询所有学生的sname、cname和degree列。

select sname,cname,degree

from students join scores

on(students.sno=scores.sno) join courses

on(scores.cno=courses.cno);

17、查询“95033”班所选课程的平均分。

select avg(degree) from scores where sno in (select sno from students where class='95033');

18、假设使用如下命令建立了一个grade表：

create table grade(low int,upp int,rank char(1));  
insert into grade values(90,100,'A');  
insert into grade values(80,89,'B');  
insert into grade values(70,79,'C');  
insert into grade values(60,69,'D');  
insert into grade values(0,59,'E');

select sno,cno,rank

from scores join grade

on(scores.degree>=grade.low and scores.degree<=grade.upp)

现查询所有同学的sno、cno和rank列。

19、查询选修“3-105”课程的成绩高于“109”号同学成绩的所有同学的记录。

select s1.sno,s1.degree

from scores s1 join scores s2

on(s1.cno=s2.cno and s1.degree>s2.degree)

where s1.cno='3-105' and s2.sno='109';

20、查询score中选学一门以上课程的同学中分数为非最高分成绩的记录。

select \*

from scores

group by sno

having count(cno)>1 and degree!=max(degree);

21、查询成绩高于学号为“109”、课程号为“3-105”的成绩的所有记录。

select s1.sno,s1.degree

from scores s1 join scores s2

on(s1.cno=s2.cno and s1.degree>s2.degree)

where s1.cno='3-105' and s2.sno='109';

22、查询“张旭“教师任课的学生成绩。

select sno,degree

from scores join courses

on(scores.cno=courses.cno) join teachers

on(courses.tno=teachers.tno)

where teachers.tname='张旭';

23、查询选修某课程的同学人数多于5人的教师姓名。

select distinct tname

from scores join courses

on(scores.cno=courses.cno) join teachers

on(courses.tno=teachers.tno)

where courses.cno in(select cno from scores group by(cno) having count(sno)>5);

24、查询95033班和95031班全体学生的记录。

select \*

from students

where class in ('95033','95031');

25、查询存在有85分以上成绩的课程cno.

select distinct cno

from scores

where degree>85;

26、查询出“计算机系“教师所教课程的成绩表。

select tname,cname,sname,degree

from teachers join courses

on(teachers.tno=courses.tno) join scores

on(courses.cno=scores.cno) join students

on(scores.sno=students.sno)

where teachers.depart='计算机系'

order by tname,cname,degree desc;

27、查询“计算机系”与“电子工程系“不同职称的教师的tname和prof。

select tname,prof from teachers where depart='计算机系' and prof not in ( select prof from teachers where depart='电子工程系' ) union select tname,prof from teachers where depart='电子工程系' and prof not in ( select prof from teachers where depart='计算机系' );

28、查询选修编号为“3-105“课程且成绩至少高于选修编号为“3-245”的同学的cno、sno和degree,并按degree从高到低次序排序。

select cno,sno,degree

from scores

where cno='3-105' and degree > any(

select degree

from scores

where cno='3-245')

order by degree desc;

29、查询选修编号为“3-105”且成绩高于选修编号为“3-245”课程的同学的cno、sno和degree.

select cno,sno,degree

from scores

where cno='3-105' and degree > all(

select degree

from scores

where cno='3-245')

order by degree desc;

30、查询所有教师和同学的name、sex和birthday.

select sname,ssex,sbirthday

from students

union

select tname,tsex,tbirthday

from teachers;

31、查询所有“女”教师和“女”同学的name、sex和birthday.

select sname,ssex,sbirthday

from students

where ssex='女'

union

select tname,tsex,tbirthday

from teachers

where tsex='女';

32、查询成绩比该课程平均成绩低的同学的成绩表。

select s1.\*

from scores s1 join (

select cno,avg(degree) adegree

from scores

group by cno) s2

on(s1.cno=s2.cno and s1.degree<s2.adegree);

33、查询所有任课教师的tname和depart.

select tname,depart

from teachers

where tno in(

select tno

from courses

);

34 查询所有未讲课的教师的tname和depart.

select tname,depart

from teachers

where tno not in(

select tno

from courses

);

35、查询至少有2名男生的班号。

select class from students where ssex='男' group by class having count(\*)>1;

36、查询student表中不姓“王”的同学记录。

select \*

from students

where sname not like '王%';

37、查询student表中最大和最小的sbirthday日期值。

select min(sbirthday),max(sbirthday)

from students;

38、以班号和年龄从大到小的顺序查询student表中的全部记录。

select \*

from students

order by class desc,sbirthday desc;

39、查询“男”教师及其所上的课程。

select teachers.tname,courses.cname

from teachers join courses

on(teachers.tno=courses.tno)

where teachers.tsex='男';

40、查询最高分同学的sno、cno和degree列。

select \*

from scores

group by cno

having degree=max(degree);

41、查询和“李军”同性别的所有同学的sname.

select s1.sname

from students s1 join students s2

on(s1.ssex=s2.ssex)

where s2.sname='李军';

42、查询和“李军”同性别并同班的同学sname.

select s1.sname

from students s1 join students s2

on(s1.ssex=s2.ssex and s1.class=s2.class)

where s2.sname='李军';

43、查询所有选修“计算机导论”课程的“男”同学的成绩表

select \*

from scores

where sno in (

select sno

from students

where ssex='男') and

cno in (

select cno

from courses

where cname='计算机导论');