-- 1、查询男女生人数

select sex , count(student\_id) as "人数"

from student

group by sex;

-- 2、查询姓张学生名单

select \* from student where student\_name like "张%";

-- 3、课程平均分从高到低显示

select subject\_name , Avg(score) as avg

from score sco ,subject sub

where sco.subject\_id = sub.subject\_id

group by sco.subject\_id

order by avg desc;

-- 4.查询有课程成绩小于60分的同学的学号、姓名；

select stu.student\_id,stu.student\_name,sco.score

from student stu , score sco

where stu.student\_id = sco.score\_id and sco.score < 60;

-- 5.查询至少有一门课与学号为1的同学所学课程相同的同学的学号和姓名；

select Distinct stu.student\_id , stu.student\_name

from student stu, score sco

where stu.student\_id = sco.student\_id and sco.subject\_id in

(select subject\_id from score where student\_id = 1)

-- 6.查询出只选修了一门课程的全部学生的学号和姓名；

select stu.student\_id , stu.student\_name

from student stu,(select student\_id ,count(subject\_id) as count from score group by student\_id) sco

where stu.student\_id = sco.student\_id and sco.count=1

-- 7.查询各科成绩最高和最低的分：以如下形式显示：课程ID，最高分，最低分;

select sco.subject\_id as"课程ID", max(sco.score) as "最高分" , min(sco.score) as "最低分"

from score sco , subject sub

where sco.subject\_id = sub.subject\_id

group by sco.subject\_id;

-- 8.查询课程编号“2”的成绩比课程编号“1”课程低的所有同学的学号、姓名；\*\*\*

select stu.student\_id , stu.student\_name

from student stu , (select student\_id,subject\_id,score from score where subject\_id =1) sco1 ,(select student\_id,subject\_id,score from score where subject\_id =2) sco2

where stu.student\_id = sco1.student\_id and sco1.student\_id = sco2.student\_id and sco1.score>sco2.score;

-- 9.查询“生物”课程比“物理”课程成绩高的所有学生的学号；

select stu.student\_id

from

student stu,

(select sco.student\_id,sco.subject\_id,score from score sco,subject sub where sub.subject\_id = sco.subject\_id and sub.subject\_name="生物") sco1,

(select sco.student\_id,sco.subject\_id,score from score sco,subject sub where sub.subject\_id = sco.subject\_id and sub.subject\_name="物理") sco2

where stu.student\_id = sco1.student\_id and sco1.student\_id = sco2.student\_id and sco1.score>sco2.score;

-- 10.查询平均成绩大于60分的同学的学号和平均成绩;

select stu.student\_id , Avg(sco.score) as Avg

from student stu , score sco

where stu.student\_id = sco.student\_id

group by stu.student\_id having Avg>60;

-- 11.查询所有同学的学号、姓名、选课数、总成绩；

select stu.student\_id as "学号" , stu.student\_name as"姓名", count(sco.subject\_id) as "选课数",sum(sco.score) as "总成绩"

from student stu

left join score sco on stu.student\_id = sco.student\_id

group by stu.student\_id,stu.student\_name;

-- 12.查询姓“李”的老师的个数；

select count(teacher\_id)

from teacher

where teacher\_name like"李%";

-- 13.查询没学过“张磊老师”课的同学的学号、姓名；

select stu.student\_id,stu.student\_name

from student stu

where stu.student\_id not in (select DisTINCT student\_id from score where subject\_id != (select sub.subject\_id as subject\_id from subject sub , teacher tea where sub.teacher\_id = tea.teacher\_id and tea.teacher\_name = "张磊老师"))

-- 14.查询学过“1”并且也学过编号“2”课程的同学的学号、姓名；

Select stu.student\_id , stu.student\_name

from student stu , (select student\_id from score where subject\_id = 1) sco1 , (select student\_id from score where subject\_id = 2) sco2

where stu.student\_id = sco1.student\_id and stu.student\_id = sco2.student\_id;

-- 15.查询学过“李平老师”所教的所有课的同学的学号、姓名；

select stu.student\_id,stu.student\_name

from student stu

where stu.student\_id in (select DisTINCT student\_id from score where subject\_id in (select sub.subject\_id as subject\_id from subject sub , teacher tea where sub.teacher\_id = tea.teacher\_id and tea.teacher\_name = "李平老师"))

-- 16.查询没有学全所有课的同学的学号、姓名；

select stu.student\_id , stu.student\_name

from student stu,score sco

where stu.student\_id = sco.student\_id

group by stu.student\_id , stu.student\_name having count(sco.student\_id) != (select count(\*) from subject);

-- 17.查询和“002”号的同学学习的课程完全相同的其他同学学号和姓名；

select stu.student\_id , stu.student\_name

from student stu , score sco

where sco.subject\_id in (select subject\_id from score where student\_id = 2) and stu.student\_id = sco.student\_id

group by stu.student\_id having count(stu.student\_id) = (select count(\*) from score where student\_id = 2)

-- 18.删除学习“叶平”老师课的SC表记录；

delete from score where subject\_id in (select sub.subject\_id from teacher tea , subject sub where sub.teacher\_id = tea.teacher\_id and tea.teacher\_name like "李平老师")

-- 19.向SC表中插入一些记录，这些记录要求符合以下条件：①没有上过编号“002”课程的同学学号；②插入“002”号课程的平均成绩；

select student\_id from student where student\_id not in (select student\_id from score sco where sco.subject\_id=2)

(select Avg(score) from score where subject\_id = 2)

insert into Score(subject\_Id , student\_id ,score)

values(2,2,65.0909)

,(2,13,65.0909);

-- 20.按平均成绩从低到高显示所有学生的“生物”、“物理”、“美术”三门的课程成绩，按如下形式显示： 学生ID,语文,数学,英语,有效课程数,有效平均分；

select

sc.student\_id , scS.score as "生物" , scW.score as "物理", scM.score as "美术", count(sc.student\_id) as "有效课程数", avg(sc.score) as "有效平均分"

from score sc,

(select student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "生物") order by score desc) scS,

(select student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "物理") order by score desc) scW,

(select student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "美术") order by score desc) scM

where sc.student\_id = scS.student\_id and sc.student\_id = scW.student\_id and sc.student\_id = scM.student\_id

group by sc.student\_id , scS.score , scW.score , scM.score

-- 21.查询各科成绩最高和最低的分：以如下形式显示：课程ID，最高分，最低分；

select subject\_id as "课程ID" , max(score) as "最低分", min(score) as "最低分"

from score

group by subject\_id

-- 22.按各科平均成绩从低到高和及格率的百分数从高到低顺序；

select

sub.subject\_name as "科目",

Avg(score) as "平均分" ,

pass.count/count(sc.subject\_id)\*100 as "及格率"

from score sc , subject sub,

(select subject\_id,count(subject\_id) as count from score where score>=60 group by subject\_id) pass

where sc.subject\_id = pass.subject\_id and sc.subject\_id = sub.subject\_id

group by sc.subject\_id

order by Avg(sc.score)

-- 23.查询各科成绩前三名的记录:(不考虑成绩并列情况) \*\*\*

select

sub.subject\_id ,

sub.subject\_name,

(select score from score sc where sc.subject\_id = sub.subject\_id group by score order by score desc limit 0,1) as "top",

(select score from score sc where sc.subject\_id = sub.subject\_id group by score order by score desc limit 1,1) as "two",

(select score from score sc where sc.subject\_id = sub.subject\_id group by score order by score desc limit 2,1) as "three"

from subject sub

-- 24.查询每门课程被选修的学生数；

select subject\_id , count(student\_id)

from score

group by subject\_id

-- 25.查询同名同姓学生名单，并统计同名人数；

select student\_name,count(student\_id) as "人数"

from student

group by student\_name

-- 26.查询每门课程的平均成绩，结果按平均成绩升序排列，平均成绩相同时，按课程号降序排列；

select subject\_id , Avg(score)

from score

group by subject\_id

order by subject\_id,subject\_id desc

-- 27.查询平均成绩大于85的所有学生的学号. 姓名和平均成绩；

select stu.student\_id , stu.student\_name , sc.avg ,"平均成绩"

from

student stu,

(select student\_id , Avg(score) as avg

from score

group by student\_id having Avg(score)>85) sc

where stu.student\_id = sc.student\_id

-- 28.查询课程名称为“物理”，且分数低于60的学生姓名和分数；

select student\_id,score

from score

where score<60 and subject\_id = (select subject\_id from subject where subject\_name="物理")

-- 29.查询课程编号为003且课程成绩在80分以上的学生的学号和姓名；

select student\_id,score

from score

where score>80 and subject\_id = 3;

-- 30.求选了课程的学生人数

select subject\_id , count(\*) as "人数"

from score

where subject\_id = 2;

-- 31.查询选修“杨艳”老师所授课程的学生中，成绩最高的学生姓名及其成绩；

select sc.student\_id,stu.student\_name,sc.score

from student stu , score sc

where sc.subject\_id in (select subject\_id from subject where teacher\_id = (select teacher\_id from teacher where teacher\_name = "张磊老师")) and sc.student\_id = stu.student\_id

order by sc.score desc limit 0,1;

-- 先查出这个老师教的最高分，然后根据这个分数筛选满足这个分数的成绩记录

select stu.student\_name ,sc.subject\_id, sc.score

from student stu , (select \* from score where score = (select max(score)

from score

where subject\_id in (select subject\_id from subject where teacher\_id = (select teacher\_id from teacher where teacher\_name = "李平老师")))) sc

where stu.student\_id = sc.student\_id;

-- 32.查询各个课程及相应的选修人数；

select sub.subject\_id,sub.subject\_name,cou.count

from

subject sub,

(select subject\_id , count(\*) as count

from score

group by subject\_id) cou

where sub.subject\_id = cou.subject\_id

-- 33.查询不同课程但成绩相同的学生的学号、课程号、学生成绩；

select stu.student\_id,sc.subject\_id,sc.score

from student stu , score sc

where sc.student\_id = stu.student\_id and sc.score in (select score from score where student\_id!=sc.student\_id)

order by sc.score desc

---

-- 34.查询每门课程成绩最好的前两名； \*\*\*\*\*

select

sub.subject\_id ,

sub.subject\_name,

(select student\_id from score sc where sc.subject\_id = sub.subject\_id order by score desc limit 0,1) as "第一名学号",

(select score from score sc where sc.subject\_id = sub.subject\_id group by score order by score desc limit 0,1) as "Topscore",

(select student\_id from score sc where sc.subject\_id = sub.subject\_id order by score desc limit 1,1) as "第二名学号",

(select score from score sc where sc.subject\_id = sub.subject\_id group by score order by score desc limit 1,1) as "Twoscore"

from subject sub

-- ---

select

sc.subject\_id,sc.student\_id ,sc.score

from

score sc,

(select subject\_id,student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "生物") order by score desc limit 0,2) scS,

(select subject\_id,student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "物理") order by score desc limit 0,2) scW,

(select subject\_id,student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "体育") order by score desc limit 0,2) scT,

(select subject\_id,student\_id,score from score where subject\_id =

(select subject\_id from subject where subject\_name = "美术") order by score desc limit 0,2) scM

where (sc.student\_id = scS.student\_id and sc.subject\_id = scS.subject\_id) or (sc.student\_id = scW.student\_id and sc.subject\_id = scW.subject\_id) or (sc.student\_id = scT.student\_id and sc.subject\_id = scT.subject\_id) or (sc.student\_id = scM.student\_id and sc.subject\_id = scM.subject\_id)

group by student\_id ,subject\_id,score

order by subject\_id

-- 35.检索至少选修两门课程的学生学号；

select stu.student\_id , count(sco.subject\_id)

from student stu left join score sco on stu.student\_id = sco.student\_id

group by stu.student\_id having count(sco.subject\_id)>=2

-- 36.查询全部学生都选修的课程的课程号和课程名；

select sub.subject\_id , sub.subject\_name

from subject sub where sub.subject\_id in (select subject\_id from score group by subject\_id having count(student\_id)=(select count(\*) from student))

-- 37.查询没学过“叶平”老师讲授的任一门课程的学生姓名；

select \* from student

where student\_id not in

(

select distinct student\_id

from score

where subject\_id in (select subject\_id from subject where teacher\_id = (select teacher\_id from teacher where teacher\_name = "李平老师"))

)

-- 38.查询两门以上不及格课程的同学的学号及其平均成绩；

select student\_id , avg(score)

from score

where student\_id in (

select student\_id

from score

where score<60

group by student\_id having count(score)>=2

)

group by student\_id

-- 39.检索“004”课程分数小于60，按分数降序排列的同学学号；

select student\_id

from score

where subject\_id = 4 and score<60

order by score desc

-- 40.删除“002”同学的“001”课程的成绩；

delete from score where student\_id = 2 and subject\_id = 1;