CREATE table class(

class\_id int(10) PRIMARY key not null auto\_increment,

class\_ name varchar(64) not null

)

CREATE table Subject(

subject\_id int(10) PRIMARY key not null auto\_increment,

subject\_name varchar(64) not null,

teacher\_id int(10)

)

CREATE table score(

score\_id int(10) PRIMARY key not null auto\_increment,

subject\_id int(10),

student\_id int(10),

score int(10)

)

CREATE table student(

student\_id INT(10) PRIMARY key not null auto\_increment,

sex varchar(64) not null,

class\_id int(10),

student\_name varchar(64)

)

CREATE TABLE techer(

teacher\_id int(10) PRIMARY KEY not null auto\_increment,

teacher\_name varchar(64) not null

)

1. 查询男生、女生的人数；

SELECT

count(\*),

sex

from student

GROUP BY sex

1. 查询姓“张”的学生名单；

SELECT

\*

FROM

student

WHERE

student\_name like '张%'

1. 课程平均分从高到低显示

SELECT

subject\_name '课程名',

avg(score)

FROM

subject,score

WHERE

`subject`.subject\_id=score.subject\_id

GROUP BY

课程名

ORDER BY

avg(score) desc

1. 查询有课程成绩小于60分的同学的学号、姓名；

SELECT

stu.student\_id '学生学号',

stu.student\_name

FROM

student stu,score sc

WHERE

stu.student\_id=sc.student\_id

and sc.score<60

1. 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

(select \* from score where subject\_id in(select subject\_id from score where student\_id='1')) a,student stu

WHERE

a.student\_id=stu.student\_id

6.查询出只选修了一门课程的全部学生的学号和姓名；

-- SELECT student\_id,

-- student\_name

-- FROM student

-- WHERE

-- student\_id =(SELECT

-- score.student\_id

-- FROM

-- score

-- GROUP BY

-- score.student\_id

-- HAVING

-- COUNT(score.subject\_id)=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

score.subject\_id,

MAX(score),

MIN(score)

FROM

score

GROUP BY subject\_id

1. 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

(SELECT \*from score where subject\_id=2) a,(SELECT \* from score where subject\_id=1) b,student stu

where

a.student\_id=b.student\_id

AND

a.score<b.score

AND

stu.student\_id=a.student\_id

1. 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,

stu.student\_name

FROM

(SELECT \*from score where subject\_id=(SELECT subject\_id from subject where subject\_name ='生物' )) a,

(SELECT \* from score where subject\_id=(SELECT subject\_id from subject where subject\_name ='物理' )) b,

student stu

where

a.student\_id=b.student\_id

AND

a.score>b.score

AND

stu.student\_id=a.student\_id

1. 查询平均成绩大于60分的同学的学号和平均成绩;

SELECT

student\_id,

AVG(score) '平均分'

FROM

score

GROUP BY

student\_id

HAVING

AVG(score)>60

1. 查询所有同学的学号、姓名、选课数、总成绩；

SELECT

student.student\_id,

student.student\_name,

count(sc.score),

sum(sc.score)

FROM

student,score sc

WHERE

student.student\_id=sc.student\_id

GROUP BY

sc.student\_id

1. 查询姓“李”的老师的个数；

SELECT count(\*)

FROM

teacher

WHERE

teacher\_name like '李%'

1. 查询没学过“张磊老师”课的同学的学号、姓名；

SELECT

student\_id '学号',

student\_name '姓名'

FROM

student

WHERE

student\_id not in(

SELECT student\_id from score where subject\_id=

(SELECT subject\_id from subject where teacher\_id=(SELECT teacher\_id from teacher where teacher\_name='张磊老师'))

)

1. 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

(SELECT \*from score where subject\_id=2) a,(SELECT \* from score where subject\_id=1) b,student stu

where

a.student\_id=b.student\_id

AND

stu.student\_id=a.student\_id

1. 查询学过“李平老师”所教的所有课的同学的学号、姓名；

SELECT

student\_id '学号',

student\_name '姓名'

FROM

student

WHERE

student\_id in(

SELECT 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'))

)

1. 查询没有学全所有课的同学的学号、姓名；

SELECT

student\_id,

student\_name

FROM

student

WHERE

student\_id not in (SELECT a.student\_id from (SELECT student\_id from score where subject\_id=1 ) a,(SELECT student\_id from score where subject\_id=2 ) b,(SELECT student\_id from score where subject\_id=3 ) c,

(SELECT student\_id from score where subject\_id=4 ) d

where a.student\_id=b.student\_id AND b.student\_id=c.student\_id and c.student\_id=d.student\_id

)

1. 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 student\_id from score where student\_id not in(

SELECT student\_id FROM score where subject\_id not in(

(SELECT subject\_id FROM score where student\_id=2) ))and

student\_id!=2

group by student\_id

having count(student\_id)=(SELECT count(subject\_id) FROM score where student\_id=2)

1. 删除学习“叶平”老师课的SC表记录；

Delete from score where subject\_id in (SELECT `subject`.subject\_id FROM `subject` where `subject`.teacher\_id in(select teacher\_id from teacher where teacher\_name='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；

20.按平均成绩从低到高显示所有学生的“语文”、“数学”、“英语”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

score.student\_id,

t1.score '生物',

t2.score '物理',

t3.score '体育',

t4.score '美术',

COUNT(score.subject\_id),

AVG(score.score)

FROM

score

LEFT JOIN (SELECT student\_id,score from score where subject\_id=(SELECT subject\_id from subject where subject\_name='生物')) t1 on score.student\_id=t1.student\_id

LEFT JOIN (SELECT student\_id,score from score where subject\_id=(SELECT subject\_id from subject where subject\_name='物理')) t2 on score.student\_id=t2.student\_id

LEFT JOIN (SELECT student\_id,score from score where subject\_id=(SELECT subject\_id from subject where subject\_name='体育')) t3 on score.student\_id=t3.student\_id

LEFT JOIN (SELECT student\_id,score from score where subject\_id=(SELECT subject\_id from subject where subject\_name='美术')) t4 on score.student\_id=t4.student\_id

GROUP BY

score.student\_id

ORDER BY AVG(score)

1. 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,

max(score),

min(score)

FROM

score

GROUP BY

subject\_id

1. 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

score.subject\_id,

avg(score) 'average',

t1.ji ‘及格率’

FROM

score,(SELECT ROUND(count2/count(sc1.subject\_id),2) ji,sc1.subject\_id from score sc1 LEFT JOIN (SELECT COUNT(sc2.subject\_id) count2,subject\_id FROM score sc2 where sc2.score>60 GROUP BY sc2.subject\_id ) s on sc1.subject\_id=s.subject\_id GROUP BY sc1.subject\_id ORDER BY ji desc) t1

where

t1.subject\_id=score.subject\_id

GROUP BY

score.subject\_id

ORDER BY

average

1. 查询各科成绩前三名的记录:(不考虑成绩并列情况)

select

t1.student\_id,t1.subject\_id,t1.score from score t1

left join

(

select score\_id,subject\_id,

(select score from score as s2 where s2.subject\_id=s1.subject\_id

order by score desc limit 0,1)as first\_num,

(select score from score as s2 where s2.subject\_id=s1.subject\_id

order by score desc limit 1,1)as second\_num,

(select score from score as s2 where s2.subject\_id=s1.subject\_id

order by score desc limit 2,1)as third\_num

from score as s1

) t2

on t1.score\_id=t2.score\_id

where t1.score=t2.first\_num or t1.score=t2.second\_num or t1.score=

t2.third\_num;

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\_name)

FROM

student

GROUP BY student\_name

1. 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) as avg

FROM

score

GROUP BY

subject\_id

ORDER BY avg asc,

subject\_id desc

1. 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,

avg(sc.score) avg

FROM

score sc,student stu

where

stu.student\_id=sc.student\_id

GROUP BY sc.student\_id

having avg>85

1. 查询课程名称为“数学”，且分数低于60的学生姓名和分数；

select student\_name,t1.sc

FROM

student,

(SELECT student\_id,score sc

FROM

score

WHERE

subject\_id=(SELECT

subject\_id

from `subject`

WHERE

subject\_name='生物')

AND

score<60) t1

where

t1.student\_id=student.student\_id

1. 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,student\_name

FROM

student

WHERE

student\_id in(SELECT student\_id from score where subject\_id=3 and score>80)

1. 求选了课程的学生人数

select count(1) from(select student\_id from score group by

student\_id)a

1. 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 student.student\_name,t1.score from(

Select distinct student\_id,score from score

Where score=(select max(score) from score where subject\_id in

(select subject\_id from`subject`where teacher\_id in(select teacher\_id

From teacher where teacher\_name='李平老师')))

)t1

Left join

student

on

t1.student\_id=student.student\_id

1. 查询各个课程及相应的选修人数；

SELECT

`subject`.subject\_name,

COUNT(score.subject\_id)

FROM

score

LEFT JOIN

subject

ON subject.subject\_id=score.subject\_id

GROUP BY

score.subject\_id

1. 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 DISTINCT

sc1.subject\_id,

sc2.subject\_id,

sc1.score,

sc2.score

from score sc1,score sc2

where sc1.score=sc2.score

and sc1.subject\_id!=sc2.subject\_id

--

1. 查询每门课程成绩最好的前两名；

select

t1.student\_id,t1.subject\_id,t1.scorefromscoret1

leftjoin

(

selectscore\_id,subject\_id,

(selectscorefromscoreass2wheres2.subject\_id=s1.subject\_id

orderbyscoredesclimit0,1)asfirst\_num,

(selectscorefromscoreass2wheres2.subject\_id=s1.subject\_id

orderbyscoredesclimit1,1)assecond\_num

fromscoreass1

)t2

ont1.score\_id=t2.score\_id

wheret1.score=t2.first\_numort1.score=t2.second\_num;

1. 检索至少选修两门课程的学生学号；

SELECT

student\_id,

COUNT(subject\_id) COUNT

FROM

score

GROUP BY

student\_id

HAVING

COUNT>=2

1. 查询全部学生都选修的课程的课程号和课程名；

Select subject\_id from score group by subject\_id having count(student\_id)

=(select count(student\_id) from student);

1. 查询没学过“叶平”老师讲授的任一门课程的学生姓名；

SELECT

student\_name

FROM

student

WHERE

student\_id not IN

(select student\_id from score where subject\_id in (SELECT `subject`.subject\_id FROM `subject` where `subject`.teacher\_id in(select teacher\_id from teacher where teacher\_name='李平老师')))

1. 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

score <60

GROUP BY

student\_id

having count(score)>=2

1. 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 score<60 and subject\_id=4order

By score desc

1. 删除“002”同学的“001”课程的成绩；
2. Delete from score where subject\_id=1andstudent\_id=2