1、

-- 查询男生、女生的人数；

SELECT

COUNT(\*) '人数',

sex '性别'

from

student

group by sex

2、

-- 查询姓“张”的学生名单；

SELECT

\*

from

student

where

student\_name like '张%'

3、

-- 课程平均分从高到低显示

SELECT

avg(score) '平均分',

subject\_name '课程'

from

score a,subject b

where

a.subject\_id = b.subject\_id

GROUP BY subject\_name

ORDER BY 平均分 DESC

4、

-- 查询有课程成绩小于60分的同学的学号、姓名；

SELECT

student\_id '学号',

student\_name '姓名'

FROM

student

WHERE

student\_id IN ( SELECT DISTINCT student\_id FROM score WHERE 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

st.student\_id,

st.student\_name

FROM

student st,

score sc

WHERE

st.student\_id = sc.student\_id

AND sc.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

b.student\_id,

b.student\_name,

COUNT(\*)

from

score a,

student b

where

a.student\_id = b.student\_id

GROUP BY a.student\_id

HAVING 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

a.subject\_id,

max(score),

min(score)

from

score a

GROUP BY a.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

DISTINCT sc1.student\_id,st.student\_name

FROM

score sc1,student st

WHERE

subject\_id=1

AND

score>

(SELECT

score

FROM

score sc2

WHERE

subject\_id=2

AND

sc2.student\_id=sc1.student\_id

)

AND

sc1.student\_id=st.student\_id

9、

-- 查询“生物”课程比“物理”课程成绩高的所有学生的学号；

-- -- 查询“生物”课程比“物理”课程成绩高的所有学生的学号；

SELECT DISTINCT

sc1.student\_id

from

score sc1,

subject sub1

where

subject\_name = '生物'

and score >

(SELECT

score

from

score sc2,

subject sub2

where

subject\_name = '物理'

and sc2.subject\_id = sub2.subject\_id

and sc2.student\_id = sc1.student\_id

)

and sc1.subject\_id = sub1.subject\_id

10、

-- 查询平均成绩大于60分的同学的学号和平均成绩;

SELECT

b.student\_id,

avg(score)

FROM

student a,

score b

WHERE

a.student\_id = b.student\_id

GROUP BY b.student\_id

HAVING avg(score)>60

11、

-- 查询所有同学的学号、姓名、选课数、总成绩；

SELECT

a.student\_id,

a.student\_name,

count(\*),

sum(score)

FROM

student a,

score b

WHERE

a.student\_id = b.student\_id

GROUP BY b.student\_id

12、

-- 查询姓“李”的老师的个数；

SELECT

count(\*)

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；

方法一:

SELECT

student\_id,

student\_name

FROM

student

WHERE

student\_id NOT IN (

SELECT

sc.student\_id

FROM

teacher tc,

SUBJECT sj,

score sc

WHERE

tc.teacher\_id = sj.teacher\_id

AND sj.subject\_id = sc.subject\_id

AND tc.teacher\_name = '张磊老师'

)

方法二:

SELECT DISTINCT

st.student\_id,

student\_name

FROM

student st,

score sc

where

st.student\_id = sc.student\_id

GROUP BY sc.student\_id

HAVING GROUP\_CONCAT( DISTINCT sc.subject\_id) not in

(SELECT teacher\_id from teacher where 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

st1.student\_id,

st1.student\_name

FROM

student st1,

score sc1

WHERE

st1.student\_id = sc1.student\_id

AND subject\_id = 1

AND (

SELECT

sc2.student\_id

FROM

score sc2,

student st2

WHERE

sc2.subject\_id = 2

AND st2.student\_id = sc2.student\_id

AND sc2.student\_id = sc1.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

student\_id,

student\_name

FROM

student

WHERE

student\_id IN (

SELECT DISTINCT

sc.student\_id

FROM

teacher tc,

SUBJECT sj,

score sc

WHERE

tc.teacher\_id = sj.teacher\_id

AND sj.subject\_id = sc.subject\_id

AND tc.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

DISTINCT

st.student\_id,

student\_name

from

student st,

score sc,

subject sub

WHERE

sc.student\_id = st.student\_id

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

GROUP BY sc.student\_id

HAVING count(sc.subject\_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

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( subject\_id ) = ( SELECT count( subject\_id ) 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

subject\_id from

(

select sc.subject\_id

from

score sc,

subject sub,

teacher tea

where

sc.subject\_id = sub.subject\_id

and

sub.teacher\_id = tea.teacher\_id

and

tea.teacher\_name = '叶平老师'

) a

)

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；

INSERT INTO score ( student\_id, subject\_id, score ) SELECT

st.student\_id,

2,

( SELECT avg(score) FROM score WHERE subject\_id = 2 )

FROM

student st

WHERE

st.student\_id NOT IN ( SELECT sc.student\_id FROM score sc WHERE sc.subject\_id = 2 )

**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；；

-- 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 sc1.student\_id,

(select score from score sc ,subject sub where sc.subject\_id = sub.subject\_id and sub.subject\_name = "生物" and sc.student\_id=sc1.student\_id) as sy,

(select score from score sc ,subject sub where sc.subject\_id = sub.subject\_id and sub.subject\_name = "物理" and sc.student\_id=sc1.student\_id) as wl,

(select score from score sc ,subject sub where sc.subject\_id = sub.subject\_id and sub.subject\_name = "体育" and sc.student\_id=sc1.student\_id) as ty,

count(sc1.subject\_id),

avg(sc1.score)

from score as sc1

group by sc1.student\_id

ORDER BY avg(sc1.score) desc

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, max(score) '最高分', min(score) '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

subject\_id,

avg(score) '平均成绩',

sum(case when score.score > 60 then 1 else 0 END)/count(\*)\*100 '及格率'

FROM

score

GROUP BY

subject\_id

ORDER BY

平均成绩 ASC,

及格率 DESC;

23、

-- 查询各科成绩前三名的记录:(不考虑成绩并列情况)

方法一:

SELECT

subject\_id,score

FROM

score sc1

WHERE

(SELECT

COUNT(\*)

FROM

score sc2

WHERE

sc1.score<sc2.score

AND

sc1.subject\_id=sc2.subject\_id

)<3

ORDER BY subject\_id

方法二

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;

ORDER BY subject\_id desc

24、

-- 查询每门课程被选修的学生数；

SELECT

subject\_id,

count( \* )

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( \*)

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) '平均成绩'

FROM

score

GROUP BY

subject\_id

ORDER BY

平均成绩 ASC,

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

st.student\_id,

student\_name,

avg(score)

FROM

score sc,

student st

where

sc.student\_id = st.student\_id

GROUP BY

sc.student\_id

HAVING avg(score) >85

28、

-- 查询课程名称为“数学”，且分数低于60的学生姓名和分数；

select

st.student\_id,

score

from

student st,

score sc,

subject sub

where

sc.subject\_id = sub.subject\_id

and sc.student\_id = st.student\_id

and sc.score < 60

and sub.subject\_name = '生物'

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

\*

FROM

score

WHERE

student\_id = 3

AND score > 80

30、

-- 求选了课程的学生人数

select count(c) from (

select count(student\_id) c from score group by student\_id) A

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

student\_name,

score

FROM

score sc,

student st

WHERE

sc.student\_id = st.student\_id

and sc.subject\_id IN ( SELECT subject\_id FROM subject sub, teacher tea where sub.teacher\_id = tea.teacher\_id and teacher\_name = '叶平老师' )

ORDER BY

score DESC

LIMIT 1

32、

-- 查询各个课程及相应的选修人数；

SELECT

sub.subject\_name,

count( \*)

FROM

score sc,

subject sub

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

GROUP BY

sc.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 DISTINCT

s1.subject\_id,

s2.subject\_id,

s1.score,

s2.score

FROM

score s1,

score s2

WHERE

s1.score = s2.score

AND s1.subject\_id != s2.subject\_id;

34、

-- 查询每门课程成绩最好的前两名；

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  
from score as s1  
) t2  
on t1.score\_id = t2.score\_id  
where t1.score = t2.first\_num or t1.score = t2.second\_num ;

35、

-- 检索至少选修两门课程的学生学号；

SELECT

student\_id

FROM

score

GROUP BY

student\_id

HAVING

count( student\_id ) > 1

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

score sc,

subject sub

where

sc.subject\_id =sub.subject\_id

GROUP BY

sc.subject\_id

HAVING

count( \* ) = ( 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

student\_id,

student\_name

FROM

student

WHERE

student\_id not IN (

SELECT

sc.student\_id

FROM

teacher tc,

SUBJECT sj,

score sc

WHERE

tc.teacher\_id = sj.teacher\_id

AND sj.subject\_id = sc.subject\_id

AND tc.teacher\_name = '叶平老师'

)

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 sc

WHERE

( SELECT Count( \* ) FROM score s1 WHERE s1.student\_id = sc.student\_id AND Score < 60 ) >= 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

score < 60

AND subject\_id = 4

ORDER BY

score DESC

40、

-- 删除“002”同学的“001”课程的成绩；

DELETE

FROM

score

WHERE

subject\_id = 1

AND student\_id = 2