建表可自行百度, 重点为查询;

一、数据准备:

1.student学生表数据:

	Stuld	StuName	StuAge	StuSex
١	0001	赵雷	18	男
	0002	钱电	18	男
	0003	孙风	18	男
	0004	李云	18	男
	0005	周梅	20	女
	0006	吴兰	20	女
	0007	郑竹	20	女
	0008	王菊 blog.cs	In.net/w ₂₀	3 310613

2.teacher老师表数据:

Teald	TeaName
0001	张三
0002	李四
0003	王五

3.course课程表数据:

Courseld	CourseName	Teald
0001	语文	0002
0002	数学	0001
0003	英语	0003

4.score成绩表数据:

Stuld	Courseld	StuScore
0001	0001	80
0001	0002	90
0001	0003	99
0002	0002	60
0002	0003	80
0003	0001	80
0003	0002	80
0003	0003	80
0004	0001	50
0004	0002	30
0004	0003	20
2225	2224	7.0

0005	0001		/6
0005	0002		87
0006	0001		31
0006	0003		34
0007	0002		89
0007	0003	•••	98

二、数据查询

1.查询平均成绩大于60分的同学的学生编号和学生姓名和平均成绩: 语句: select st.Stuld,st.StuName as st_name,avg(sc.StuScore) from score as sc,student as st where st.Stuld = sc.Stuld group by st.Stuld having avg(sc.StuScore) > 60;

结果:



2.查询所有学生的学号、姓名、选课数、总成绩

语句: select st.Stuld,st.StuName,count(sc.Stuld),sum(sc.Stuscore) from student as st,score as sc where st.Stuld = sc.Stuld group by sc.Stuld;

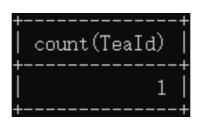
结果:

+		t	sum(sc.Stuscore)
StuId	StuName	count(sc.StuId)	
0001 0002 0003 0004 0005 0006 0007	赵钱孙李周吴郑雷电风云梅兰竹	3 2 3 3 2 2 2 2	269 140 240 100 163 65 187

3.查询姓"张"的老师的个数

语句: select count(Teald) from Teacher where TeaName like '张%';

结果:



4.查询学过"张三"老师所教的所有课的同学的学号、姓名

语句: select Student.Stuld,Student.StuName from student where Stuld in (select score.Stuld from score,course,teacher where score.Courseld = course.Courseld and course.Teald = teacher.Teald and Teacher.TeaName = '张三');



5.查询没学过"张三"老师授课的学生的学号、姓名

语句: select Student.Stuld,Student.StuName from student where Stuld not in (select score.Stuld from score,course,teacher where score.Courseld = course.Courseld and course.Teald = teacher.Teald and Teacher.TeaName = '张三');

结果:



6.查询学过编号为"0001"的课程并且也学过编号为"0002"的课程的学生的学号、姓名

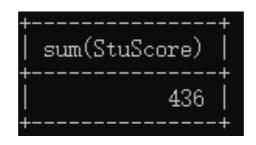
语句: select Student.Stuld,Student.StuName from Student,Score where Student.Stuld = Score.Stuld and Score.Courseld = '0001' and exists (select * from score as sc where sc.Stuld = Score.Stuld and sc.Courseld = '0002');



7.查询课程编号为"0002"的总成绩

语句: select sum(StuScore) from score where Courseld = '0002';

结果:



8.查询所有课程成绩小于等于60分的学生的学号、姓名

语句: select Student.Stuld,Student.StuName from student where Student.Stuld not in (select Student.Stuld from student,score where Student.Stuld = Score.Stuld and StuScore > 60); 结果:



9.查询没有学全所有课的学生的学号、姓名

语句: select Student.Stuld,Student.StuName from student,score

where Student.Stuld = Score.Stuld group by
Student.Stuld,Student.StuName having count(courseld) < (select count(courseld) from course);

结果:

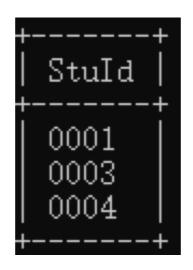


10.查询至少有一门课与学号为"0001"的学生所学课程相同的学生的学号和姓名

语句: select Student.Stuld,Student.StuName from student,score where Student.Stuld = Score.Stuld and Courseld in (select courseld from score where Stuld = '0001');

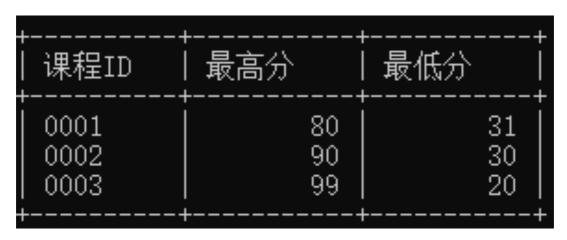


11.查询和"0001"号同学所学课程完全相同的其他同学的学号语句: select Stuld from score where courseld in (select courseld from score where Stuld = '0001') group by Stuld having count(*) = (select count(*) from score where Stuld = '0001'); 结果:



12.查询各科成绩最高和最低的分: 以如下的形式显示: 课程ID, 最高分, 最低分

语句: select Courseld as 课程ID,max(StuScore) as 最高分,min(StuScore) as 最低分 from score group by courseld;结果:



13.按各科及格率的百分数从高到低排列,以如下形式显示:课程号课程名平均成绩及格百分数

语句: select Course.CourseId as 课程号,Course.CourseName as 课程名,avg(Score.StuScore) as 平均成绩,100 * sum(case when ifnull(Score.StuScore,0)>=60 then 1 else 0 end)/count(*) as 及格百分数 from course,score where Score.CourseId = Course.CourseId group by Score.CourseId order by 及格百分数 desc;结果:

 课程 号 	+ 课程名 	+ 平均成绩	+ 及格百分数
0002	数学	72.66666666666667	83. 3333
0003	英语	68.5	66. 6667
0001	语文	63.4	60. 0000

14.查询不同老师所教不同课程平均分从高到低显示

语句: select Teacher.teald as 教师ID,Teacher.teaName as 教师姓名,Course.courseld as 课程ID,avg(Score.StuScore) as 平均 成绩 from score,teacher,course where score.courseld = Course.courseld and Course.teald = Teacher.teald group by Score.courseld order by avg(Score.StuScore) desc;

结果:

+ 教师ID	+ 教师姓名 	+ 课程ID	+ 平均成绩
0001 0003 0002	- - - - - - - - - - - - - - - - - - -	0002 0003 0001	72.666666666666666666666666666666666666

15.使用分段[100-85],[85-70],[70-60],[<60]来统计各科成绩,分别统计各分数段人数:课程ID和课程名称

语句: select Score.courseld as 课程ID,courseName as 课程名称,sum(case when stuScore between 85 and 100 then 1 else 0 end) as '[100-85]',sum(case when stuScore between 70 and 85 then 1 else 0 end) as '[85-70]',sum(case when stuScore between 60 and 70 then 1 else 0 end) as '[70-60]',sum(case when stuScore < 60 then 1 else 0 end) as '[<60]' from Score,Course where Score.courseld = Course.courseld group by Score.courseld;

+ 课程ID -	+ 课程名称 	[100-85]	[85-70]	[70-60]	[<60]
0001 0002 0003	 语文 数学 英语	0 3 2	3 1 2	0 1 0	2 1 2

16.查询学生平均成绩及其名次

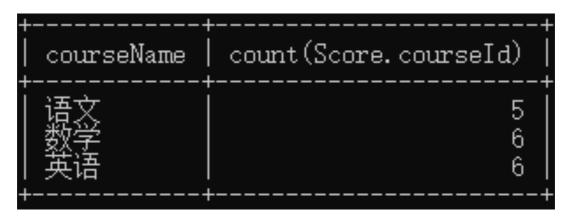
语句: select 1+(select count(distinct 平均成绩) from (select stuld,avg(stuScore) as 平均成绩 from Score group by stuld) as T1 where 平均成绩 > T2.平均成绩) as 名次,stuld as 学生学号,平均成绩 from (select stuld,avg(stuScore) 平均成绩 from Score group by stuld) as T2 order by 平均成绩 desc;

结果:

+ 名次	 学生学号 	 平均成绩
1 2 3 4 5 6 7	0007 0001 0005 0003 0002 0004 0006	93.5 89.666666666666667 81.5 80 70 33.33333333333333

17.查询每门课程被选修的学生数

语句: select Course.courseName,count(Score.courseld) from Score,Course where Score.courseld = Course.courseld group by Score.courseld;



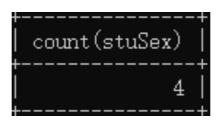
18.查询出只选修了一门课程的全部学生的学号和姓名 语句:select Student.stuld,Student.stuName from Student,Score where Score.stuld = Student.stuld group by Score.stuld having count(Score.courseld) = 1; 结果:

Empty set (0.06 sec)

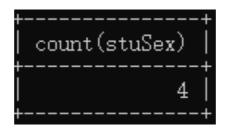
19.查询男生、女生人数

语句: select count(stuSex) from student where stuSex = '男';select count(stuSex) from student where stuSex = '女';

结果:



,



20.查询姓"李"的学生名单

语句: select stuName from student where stuName like '李%';

结果:

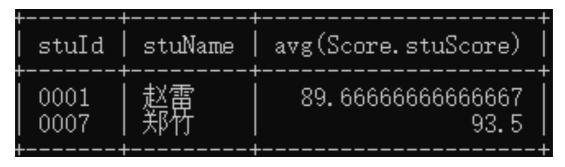


21.查询同名同姓学生名单并统计同名人数

语句: select stuName,count(*) from student group by stuName having count(*) > 1;

结果:

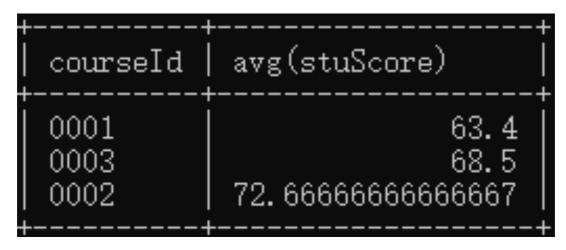
22.查询平均成绩大于85的所有学生的学号、姓名和平均成绩 语句: select Student.stuld,Student.stuName,avg(Score.stuScore) from Student,Score where Student.stuld = Score.stuld group by Student.stuld having avg(Score.stuScore) > 85; 结果:



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

语句: select courseld,avg(stuScore) from score group by courseld order by avg(stuScore),courseld desc;

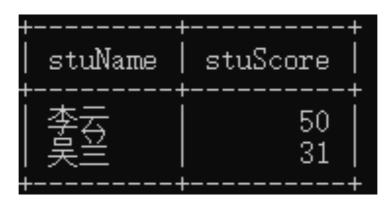
结果:



24.查询课程名称为"语文"且分数低于60的学生姓名和分数

语句: select Student.stuName,Score.stuScore from
Student,Course,Score where Course.courseName = '语文' and
Course.courseId = Score.courseId and Score.stuId = Student.stuId
and Score.stuScore < 60;

结果:



25.查询所有学生的选课情况

语句: select

Score.stuld,Score.courseld,Student.stuName,Course.courseName from Score,Student,Course where Score.stuld = Student.stuld and Score.courseld = Course.courseld;

stuId	 courseId	stuName	courseName
0001 0003 0004 0005 0006 0001 0002 0003 0004 0005 0007 0001 0002 0003 0004 0006 0007	0001 0001 0001 0001 0002 0002 0002 0002	- 赵孙李周吴赵钱孙李周郑赵钱孙李吴勒	

26.查询任何一门课程成绩在70分以上的学生学号、姓名、课程号和分数

语句: select distinct

Student.stuld,Student.stuName,Score.courseld,Score.stuScore from Student,Score where Score.stuScore>=70 and Score.stuld = Student.stuld;

+	+	+	++
stuId	stuName	courseId	stuScore
0001 0001 0001 0002 0003 0003 0003 0005	赵赵赵钱孙孙孙周周雷雷雷雷电风风风梅梅	0001 0002 0003 0003 0001 0002 0003 0001 0002	80 90 99 80 80 80 80 76 87
0007	郑竹	0002	89
0007	郑 称s://blo	g. 090 Anet/w	q123106 ⁹ 63

27.查询不及格的课程并按课程号从大到小排列

语句: select distinct courseld from Score where stuScore<60 order by courseld desc;

结果:



28.查询课程编号为0003且课程成绩在80分以上的学生的学号和姓名 语句: select Student.stuld,stuName from Student,Score where Student.stuld = Score.stuld and courseld = '0003' and stuScore >80;

结果:



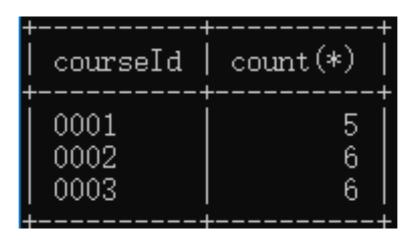
29.查询选修"张三"老师所授课程的学生中成绩最高的学生姓名及其成绩

语句: select Student.stuName,Score.stuScore from Student,Score,Course,Teacher where Teacher.teaName = '张三' and Teacher.teald = Course.teald and Course.courseld = Score.courseld and Score.stuId = Student.stuId and Score.stuScore = (select max(stuScore) from score where courseld = Course.courseld); 结果:



30.查询各个课程及相应的选修人数

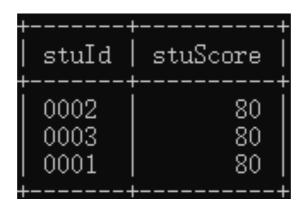
语句: select courseld,count(*) from score group by courseld;



31.查询有2门不同课程成绩相同的学生的学号、学生成绩

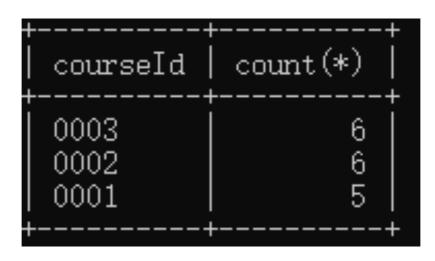
解决思路:将score进行裂变a,b项后,进行成绩相同但是学号不同的并列项进行判断,得出结果

语句: select distinct a.stuld,b.stuScore from Score a,Score b where a.stuScore = b.stuScore and a.courseld<>b.courseld; 结果:



32.统计每门课程的学生选修人数,要求输出课程号和选修人数,查询结果按人数降序排序,若人数相同,按课程号降序排序

语句: select courseld,count(*) from score group by courseld order by count(*) desc,courseld desc;



33.查询至少选修两门课程的学生学号

语句: select stuld from Score group by stuld having count(courseld)

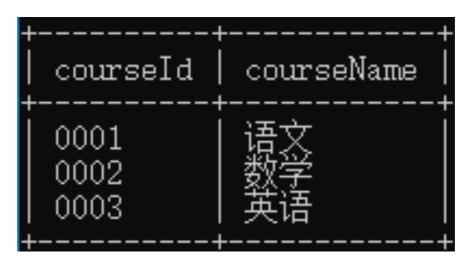
>=2;

结果:



34.查询全部学生都选修的课程的课程号和课程名

语句: select courseld,courseName from Course where courseld in (select courseld from score group by courseld);



35.查询没学过"张三"老师讲授的任一门课程的学生姓名

语句: select stuName from Student where stuld not in(select stuld from Course,Teacher,Score where Teacher.teaName = '张三' and Teacher.teald = Course.teald and Course.courseld = Score.courseld); 结果:



36.查询两门以上不及格课程的同学的学号及其平均成绩

语句: select stuld,avg(ifnull(stuScore,0)) from score where stuld in (select stuld from score where stuScore <60 group by stuld having count(*) >2) group by stuld;

```
+-----+
| stuId | avg(ifnu11(stuScore,0)) |
+-----+
| 0004 | 33.33333333333333
```

37.检索课程编号为"0003"且分数小于60的学生学号,结果按分数降序排列

语句: select stuld from score where courseld = '0003' and stuScore < 60 order by stuScore desc;

结果:



38.查询"0001"课程比"0002"课程成绩高的学生的信息及课程分数语句: select A.stuld from (select stuld,stuScore from Score where courseld = '0001')A,(select stuld,stuScore from Score where courseld = '0002')B where A.stuScore > B.stuScore and A.stuld = B.stuld;

