

#查询显示成绩表中的最高分，平均分。

```
select max(score), avg(score) from score;
```

#查询学生的学号，姓名 和 出生日期，按院系编号降序。

```
select id,name,birthday from stu order by departmentId desc;
```

#查询所有学生的学号，姓名和院系名。

```
select stu.id,stu.name,department.name from stu join department on stu.departmentId = department.id;
```

#查询参加了高等数学课程的考试的学生姓名和考试成绩。

```
select stu.name, score.score from stu join score on stu.id = score.stuid join lesson on score.LessonId = lesson.lessonid where lesson.lessonName = '数学';
```

#查询每个学院的学生人数。

```
select departmentId, department.name, count(*) from stu join department on stu.departmentId = department.id group by departmentId;
```

#查询平均分最高的 5 名学生的学号，姓名和平均分。

```
select stu.id, stu.name, avg(score) avgscore from stu join score on stu.id = score.stuid group by stu.id order by avg(score) desc limit 5;
```

```
select stu.id, stu.name, avg(score) avgscore, row_number() over w from stu join score on stu.id = score.stuid group by stu.id window w as (order by avg(score) desc) limit 5;
```

```
select stu.id, stu.name, avgscore, rk from stu join
```

```
(select stuid , avg(score) avgscore, rank() over w rk from score group by stuid window w as (order by avg(score) desc)) T on stu.id = T.stuid where rk <=5 order by rk;
```

#查询总学分高于 10 分的所有学生

```
select stu.*, sum(xf) zxf from stu join score on stu.id = score.stuid join lesson on lesson.lessonid = score.lessonid group by stu.id having zxf>=10;
```

#查询数学学院的学生的学号，姓名，所选课程的成绩和等级,并按成绩从高到低排序。

```
select stu.id, stu.name, score.score, grade.grade from stu join department on stu.departmentId = department.id join score on stu.id = score.stuid join lesson on score.LessonId = lesson.lessonid
```

```
join grade on score.score >= grade.lowScore and score.score <= grade.highScore where department.name = '数学学院' order by score desc, id;
```

```
select stu.id, stu.name, score, case when score>=90 then 'A' when score>=80 then 'B' when score >=70 then 'C' when score >=60 then 'D' else 'E' end grade
```

```
from stu join department on stu.departmentId = department.id join score on stu.id = score.stuid
```

```
        join lesson on score.LessonId = lesson.lessonid  
where department.name = '数学学院' order by score desc,id;
```

#查询数学学院的学生的学号， 姓名， 获得的学分并按学分从高到低排序。

```
select stu.id, stu.name, sum(lesson.xf) as totalXf  
    from stu join department on stu.departmentId = department.id  
        join score on stu.id = score.stuid  
        join lesson on score.LessonId = lesson.lessonid  
where department.name = '数学学院'  
group by stu.id  
order by totalXf desc;
```

#查询英语成绩最高的学生的学号， 姓名， 所有功课的成绩和所在学院。

```
select stu.id, stu.name, score, department.name  
    from stu join department on stu.departmentId = department.id  
        join score on stu.id = score.stuid  
    where stuid = (select stuid from score join lesson on score.lessonid = lesson.lessonid  
where lesson.lessonName = '英语' order by score desc limit 1)
```