

(1) 检索“陈迪茂”老师所教授的课程号和课程名

```
1 select oc.class_id, c.class_name
2 from teacher
3 join open_class oc on teacher.teacher_id = oc.teacher_id
4 join class c on oc.class_id = c.class_id
5 where teacher.teacher_name = '陈迪茂';
```



	class_id	class_name
1	08305002	数据库原理
2	08305004	系统结构

(2) 检索“计算机软件”专业的全体女生的学号、姓名

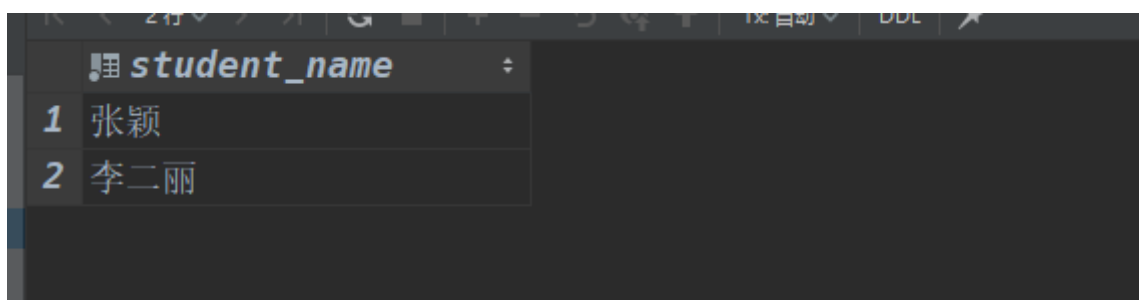
```
1 select student_id, student_name
2 from student
3 join department d on student.yxh = d.yxh
4 where d.yxh='01' and student.gender='女';
```



	student_id	student_name
1	1103	张颖
2	1104	刘晶晶
3	1106	李二丽

(3) 检索至少选修“王晓明”老师所授课程中一门课程在的女学生姓名

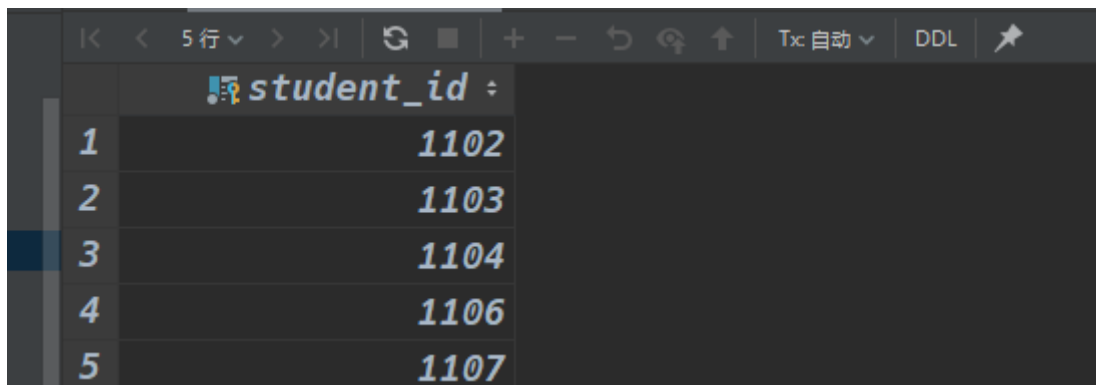
```
1 select distinct student_name from student
2 inner join select_class sc on student.student_id = sc.student_id
3 where gender = '女' and sc.class_id in (select class_id from open_class
4 inner join teacher t on open_class.teacher_id = t.teacher_id
5 where t.teacher_name= '陈迪茂');
```



	student_name
1	张颖
2	李二丽

(4) 检索至少选修两门课程的学生学号

```
1 select student_id from select_class
2 group by student_id
3 having count(student_id) >= 2;
```

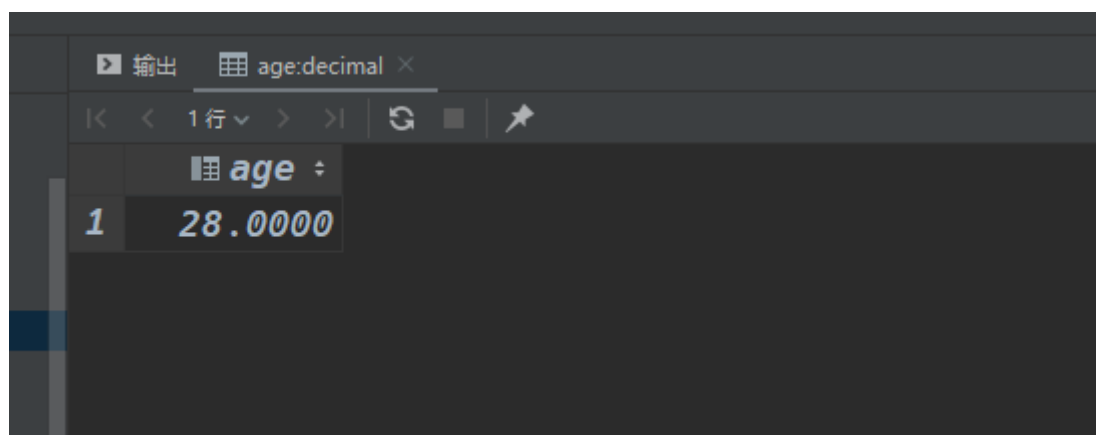


The screenshot shows a database query result in a dark-themed interface. The result is a table with two columns: an index from 1 to 5 and a column labeled 'student_id'. The values in the 'student_id' column are 1102, 1103, 1104, 1106, and 1107.

	student_id
1	1102
2	1103
3	1104
4	1106
5	1107

(5) 求选修通信课程的学生们的平均年龄

```
1 select avg(TIMESTAMPDIFF(YEAR, birthday, CURDATE())) as age from select_class
2 left join student s on sc.student_id = s.student_id
3 left join class c on sc.class_id = c.class_id
4 where class_name = '通信学';
```



The screenshot shows a database query result in a dark-themed interface. The result is a table with two columns: an index '1' and a column labeled 'age'. The value in the 'age' column is 28.0000. The interface also shows a toolbar with '输出' (Output) and 'age:decimal'.

	age
1	28.0000

(6) 求“马小红”老师所教授课程的每门课程的平均成绩

```
1 select avg(score) from select_class
2 group by class_id
3 having class_id in (select distinct class_id from open_class
4 inner join teacher t on open_class.teacher_id = t.teacher_id
5 where teacher_name = '马小红');
```

avg(score):decimal	
`avg(score)`	
1	75.8333
2	74.3333
3	81.5000

(7) 检索姓“刘”的所有的“计算机学院”的学生的姓名和年龄

```

1 select student_name , TIMESTAMPDIFF(YEAR, birthday, CURDATE()) as age from
   student
2 where left(student_name,1) = '刘' and yxh = (select yxh from department
3 where depart_name = '计算机学院');

```

Result 12	
student_name	
age	
1	刘晓明
2	刘晶晶
3	刘成刚

(8) 在SC表中检索成绩为空值的学生学号与课程号

```

1 select student_id, class_id from select_class
2 where select_class.score is null;

```

student_id	
class_id	
1	1102 08305004
2	1103 08305001
3	1103 08305004
4	1104 08302001
5	1107 08305004