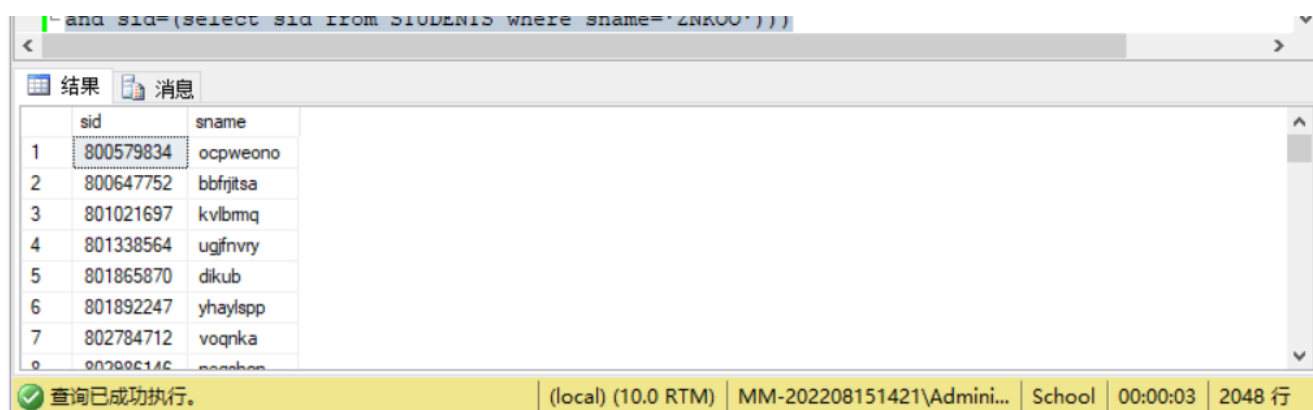


姓名	学号
崔璨明	20337025

1.

查询选修C++课程的成绩比姓名为 ZNKOO的学生高的所有学生的编号和姓名。

```
select sid,sname
from STUDENTS
where sid in
(select sid from CHOICES where cid in
(select cid from COURSES where cname='c++')
and score> (select score from CHOICES
where cid in(select cid from COURSES where cname='c++')
and sid in (select sid from STUDENTS where sname='ZNKOO'))
)
```



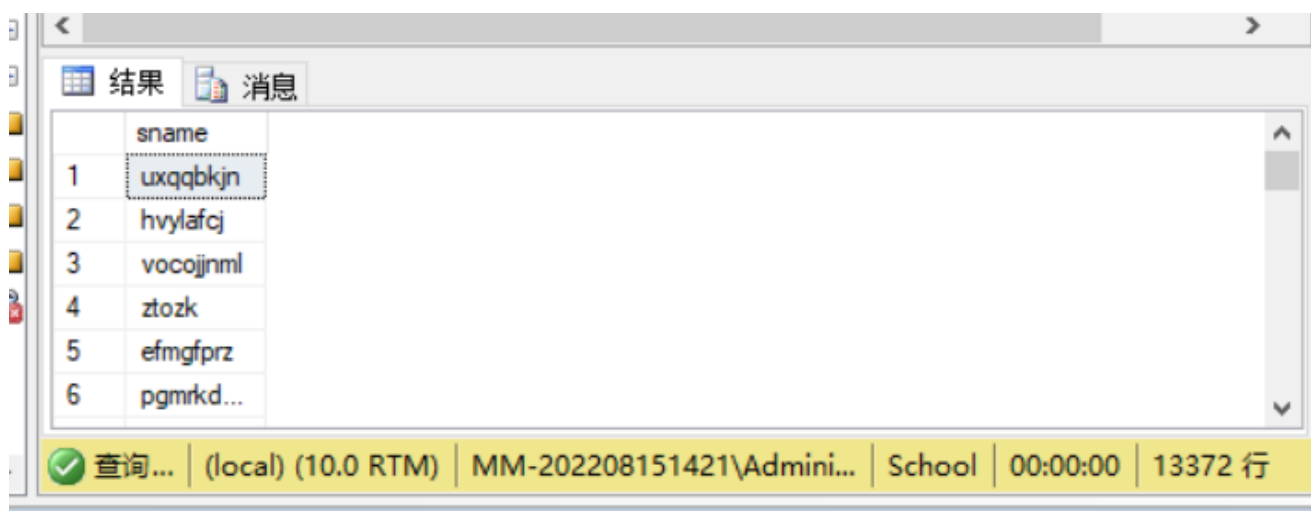
	sid	sname
1	800579834	ocpweono
2	800647752	bbfjitsa
3	801021697	kvlbmq
4	801338564	ugjfnvry
5	801865870	dikub
6	801892247	yhaylspp
7	802784712	voqnka
8	802996146	ocpweono
9	803000000	ocpweono

查询已成功执行。 (local) (10.0 RTM) MM-202208151421\Admini... School 00:00:03 2048 行

2.

找出和学生883794999或学生850955252的年级一样的学生的姓名

```
select sname
from STUDENTS
where grade=(select grade from STUDENTS where sid=883794999)
or grade=(select grade from STUDENTS where sid=850955252)
```



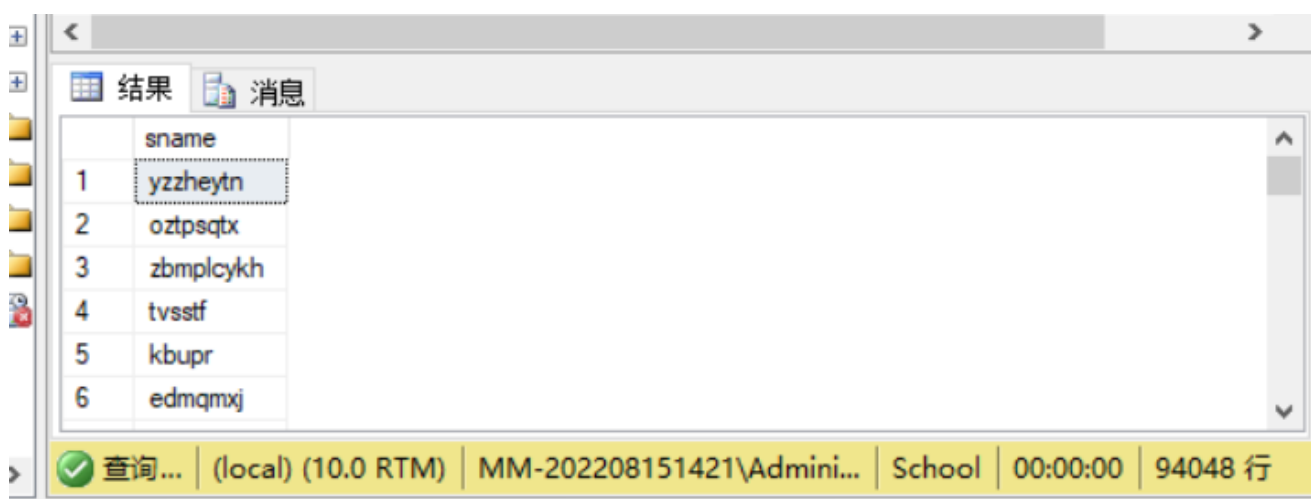
	sname
1	uxqqbkjn
2	hvylafcj
3	vocojjnml
4	ztozk
5	efmgfprz
6	pgmrkd...

查询... (local) (10.0 RTM) MM-202208151421\Admini... School 00:00:00 13372 行

3.

查询没有选修Java的学生名称

```
select sname
from STUDENTS
where sid not in
(select sid from CHOICES
where cid =(select cid from COURSES where cname ='java')
)
```



	sname
1	yzzheytn
2	oztpsqtz
3	zbmplcykh
4	tvsttf
5	kbupr
6	edmqmxj

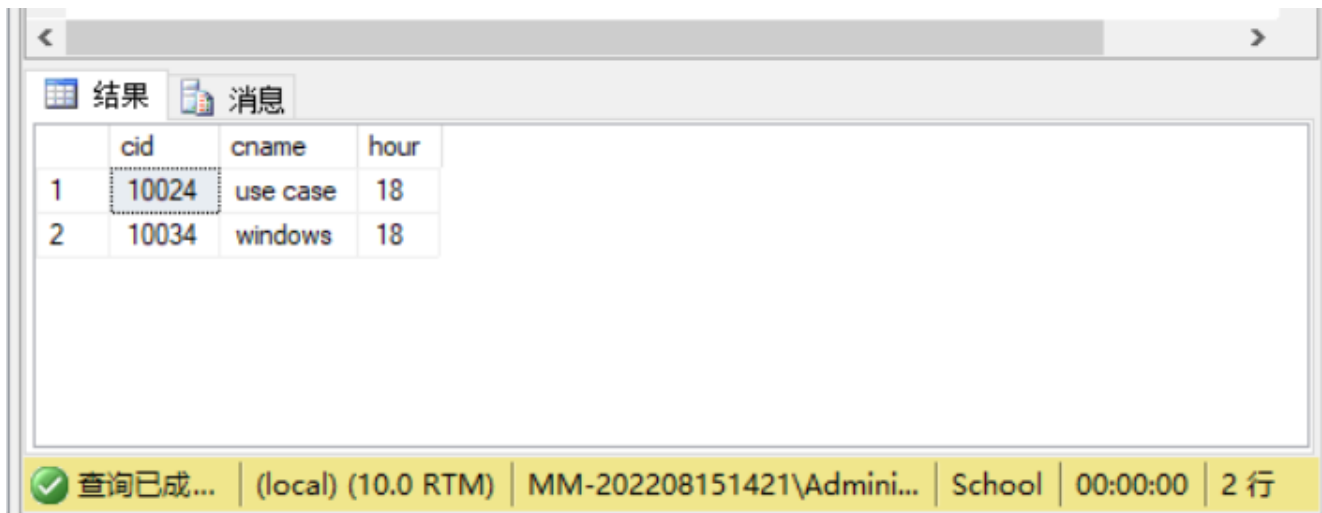
查询... (local) (10.0 RTM) MM-202208151421\Admini... School 00:00:00 94048 行

4.

找出课时最少的课程的详细信息

```
select *
from COURSES
```

```
where hour<=all(select hour from COURSES)
```



The screenshot shows a database query result window with a title bar and two tabs: '结果' (Results) and '消息' (Messages). The '结果' tab is active, displaying a table with four columns: 'cid', 'cname', and 'hour'. The table contains two rows of data. The status bar at the bottom indicates the query is successful, the server is (local) (10.0 RTM), the user is MM-202208151421\Admini..., the database is School, the execution time is 00:00:00, and there are 2 rows.

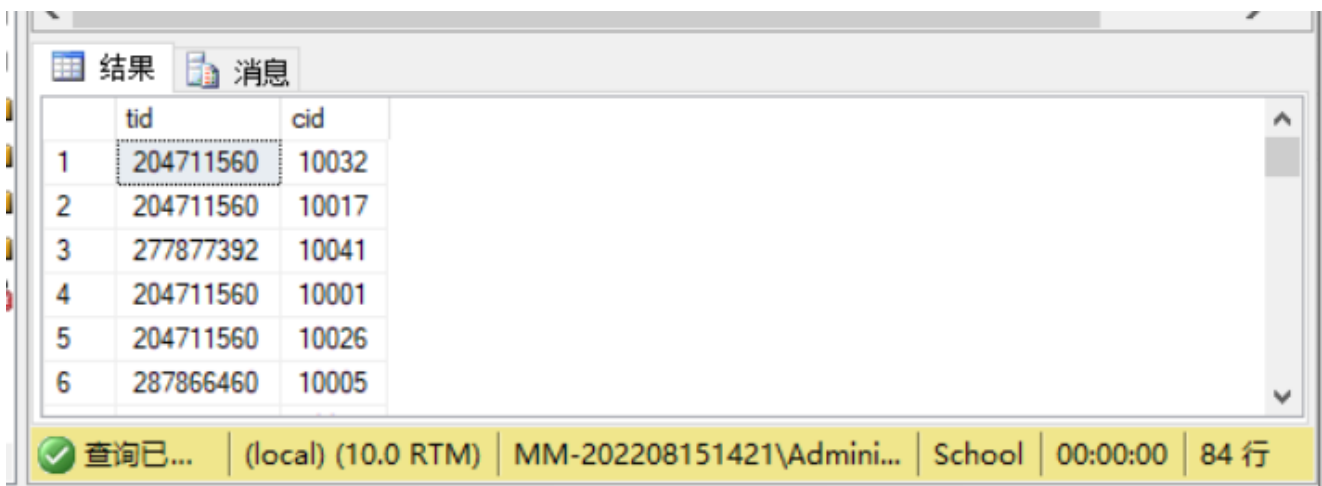
	cid	cname	hour
1	10024	use case	18
2	10034	windows	18

查询已成... | (local) (10.0 RTM) | MM-202208151421\Admini... | School | 00:00:00 | 2 行

5.

查询工资最高的教师的编号和开设的课程号

```
select TEACHERS.tid,CHOICES.cid
from TEACHERS join CHOICES on teachers.tid=CHOICES.tid
where TEACHERS.tid in
(select tid from TEACHERS
where salary = (select max(salary) from TEACHERS))
```



The screenshot shows a database query result window with a title bar and two tabs: '结果' (Results) and '消息' (Messages). The '结果' tab is active, displaying a table with two columns: 'tid' and 'cid'. The table contains six rows of data. The status bar at the bottom indicates the query is successful, the server is (local) (10.0 RTM), the user is MM-202208151421\Admini..., the database is School, the execution time is 00:00:00, and there are 84 rows.

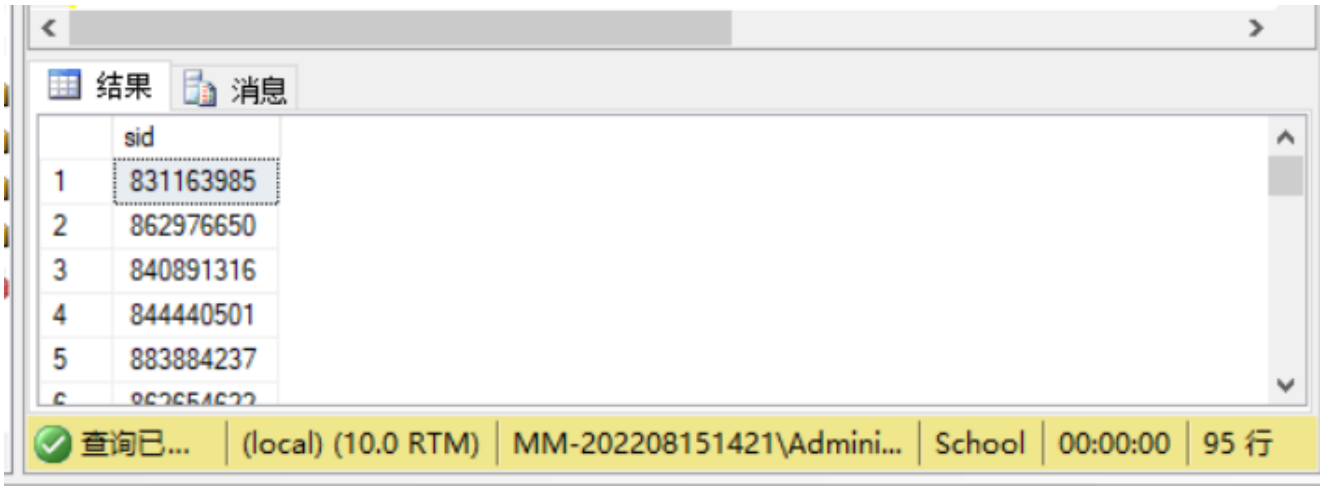
	tid	cid
1	204711560	10032
2	204711560	10017
3	277877392	10041
4	204711560	10001
5	204711560	10026
6	287866460	10005

查询已成... | (local) (10.0 RTM) | MM-202208151421\Admini... | School | 00:00:00 | 84 行

6.

找出选修课程ERP成绩最高的学生编号

```
select sid
from CHOICES
where cid in(select cid from COURSES where cname='ERP')
and score in(select max(score) from CHOICES where cid in (select cid from
COURSES where cname='ERP'))
```



The screenshot shows a SQL query result window with a table containing student IDs (sid) for the course 'ERP'. The table has 95 rows. The first five rows are visible:

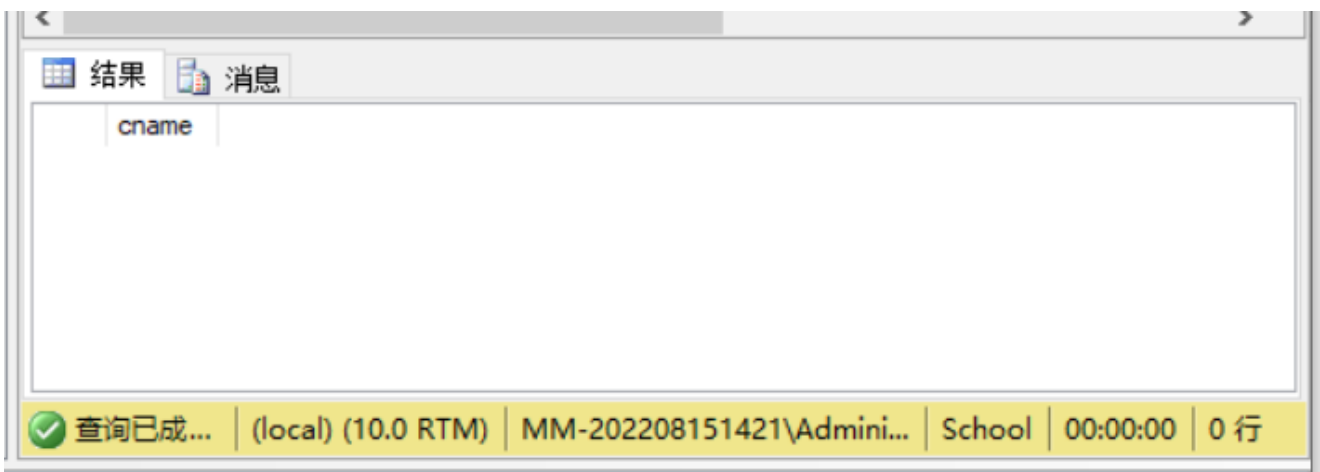
	sid
1	831163985
2	862976650
3	840891316
4	844440501
5	883884237
6	862654622

The status bar at the bottom indicates: 查询已... (local) (10.0 RTM) MM-202208151421\Admini... School 00:00:00 95 行

7、

查询没有学生选修的课程名称

```
select cname
from COURSES
where cid not in (select cid from CHOICES)
```

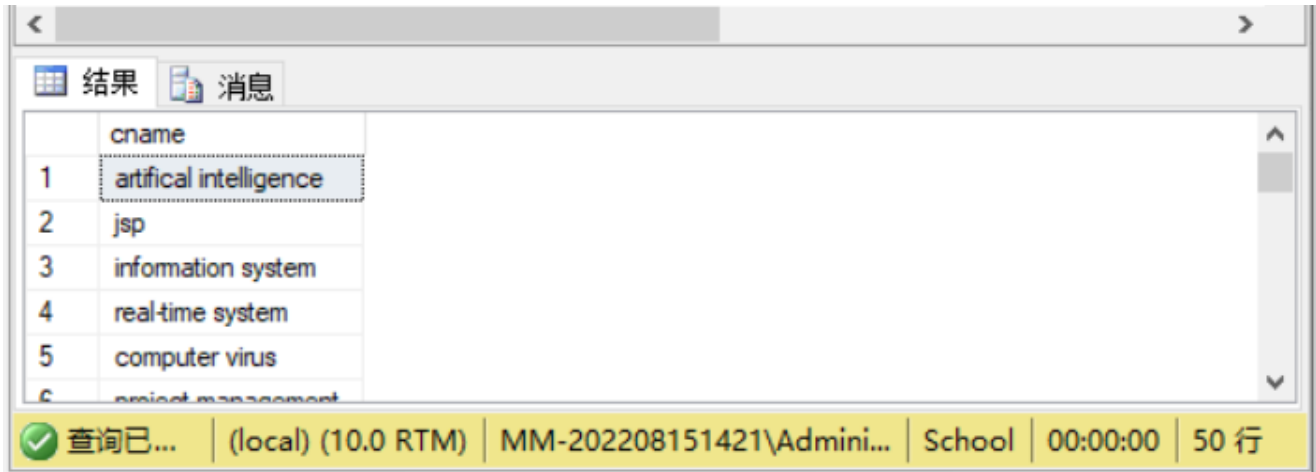


The screenshot shows a SQL query result window with a table containing course names (cname). The table is empty, indicating no results were found. The status bar at the bottom indicates: 查询已成... (local) (10.0 RTM) MM-202208151421\Admini... School 00:00:00 0 行

8.

查询讲授课程UML的教师所讲授的所有课程名称

```
select cname
from COURSES
where cid in
(select cid from CHOICES where tid in(select tid from CHOICES
where cid in (select cid from COURSES where cname='UML') ))
```



The screenshot shows a database query result window with a tab labeled '结果' (Results). The query results are displayed in a table with two columns: an index and 'cname'. The results are as follows:

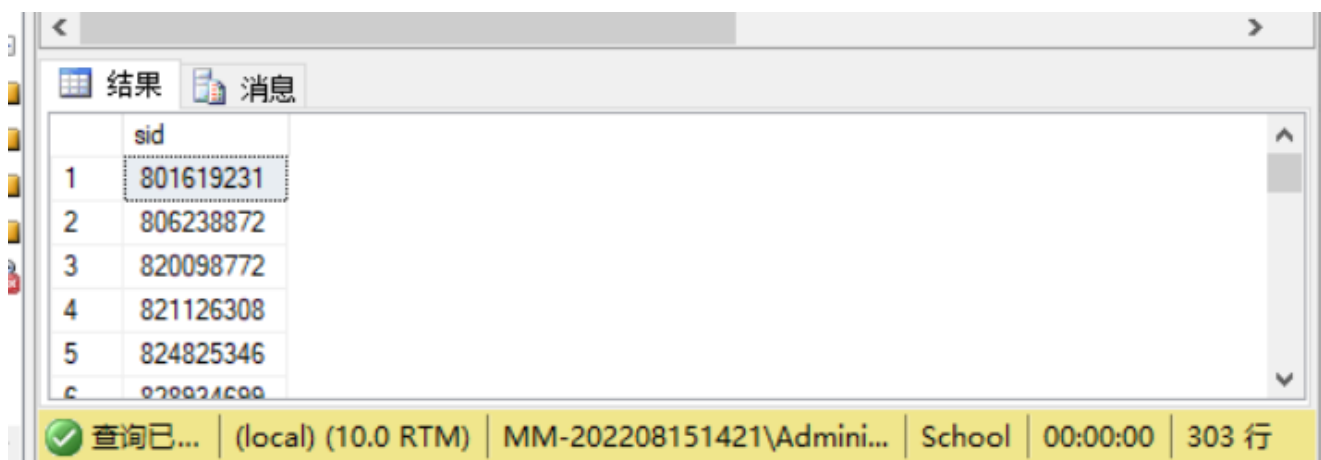
	cname
1	artificial intelligence
2	jsp
3	information system
4	real-time system
5	computer virus
6	project management

At the bottom of the window, a status bar indicates: '查询已...' (Query completed), '(local) (10.0 RTM)', 'MM-202208151421\Admini...', 'School', '00:00:00', and '50 行' (50 rows).

9.

使用集合交运算，查询既选修了database又选修了UML课程的学生编号

```
(select sid
from CHOICES where cid in(select cid from COURSES where cname='database'))
INTERSECT
(select sid
from CHOICES where cid in(select cid from COURSES where cname='UML'))
```



The screenshot shows a database query result window with a tab labeled '结果' (Results). The query results are displayed in a table with two columns: an index and 'sid'. The results are as follows:

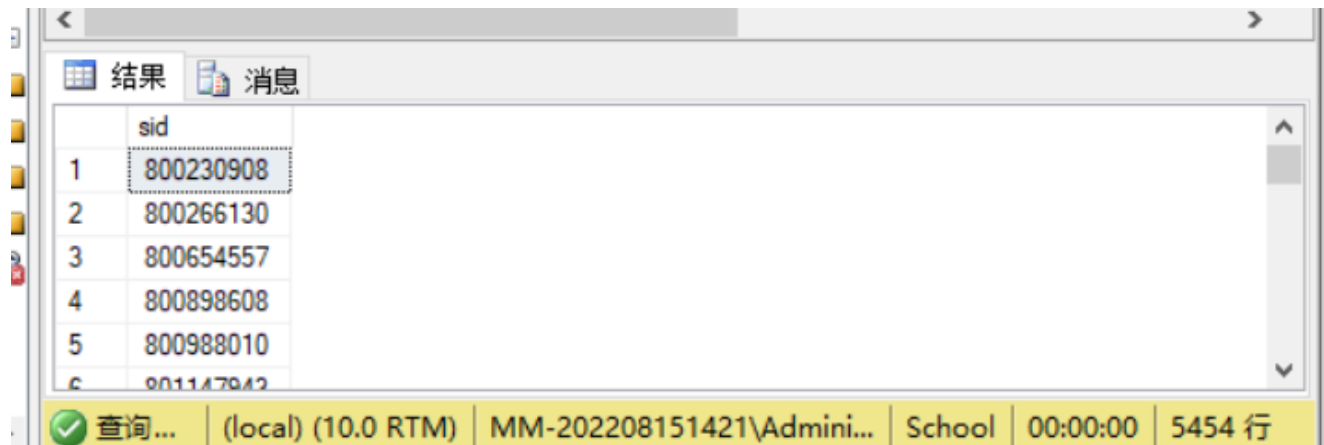
	sid
1	801619231
2	806238872
3	820098772
4	821126308
5	824825346
6	829821699

At the bottom of the window, a status bar indicates: '查询已...' (Query completed), '(local) (10.0 RTM)', 'MM-202208151421\Admini...', 'School', '00:00:00', and '303 行' (303 rows).

10.

使用集合减运算，查询选修了database却没有选修UML课程的学生编号

```
(select sid
from CHOICES where cid in(select cid from COURSES where cname='database'))
EXCEPT
(select sid
from CHOICES where cid in(select cid from COURSES where cname='UML'))
```



	sid
1	800230908
2	800266130
3	800654557
4	800898608
5	800988010
6	801147942

查询... (local) (10.0 RTM) MM-202208151421\Admini... School 00:00:00 5454 行