

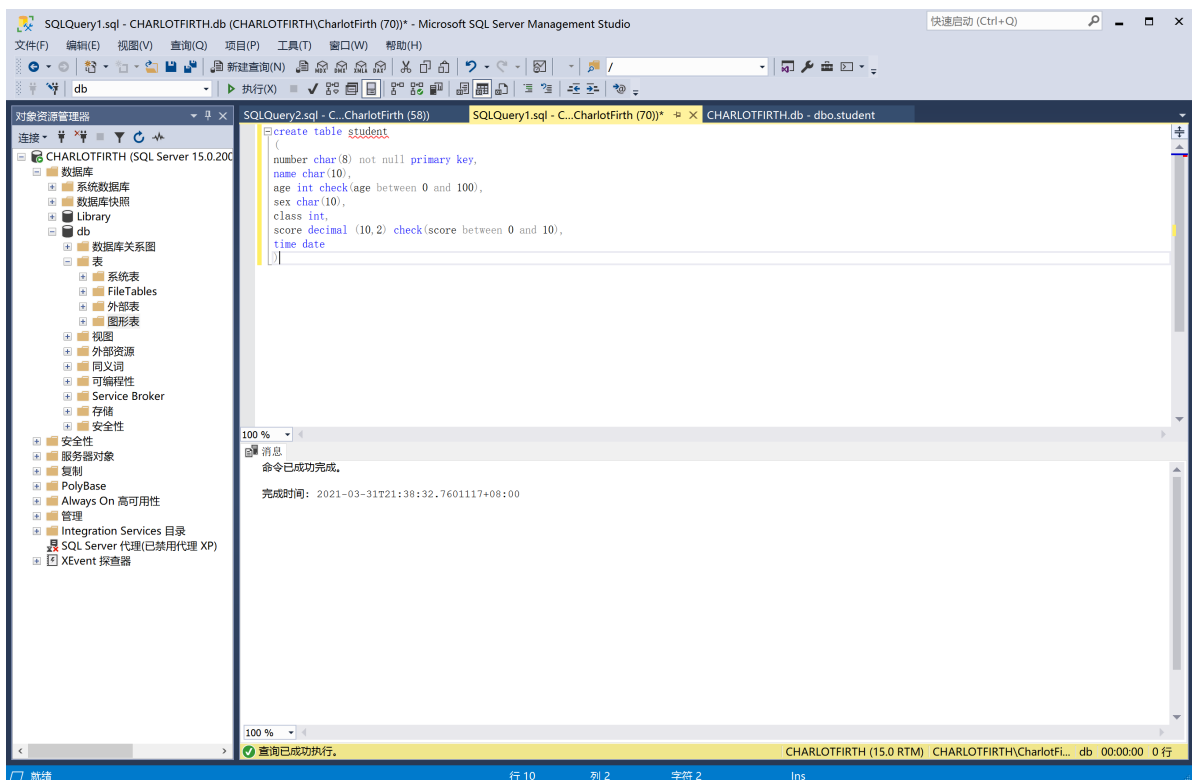
TASK 1

Q1

执行SQL语句

```
create table student
(
    number char(8) not null primary key,
    name char(10),
    age int check(age between 0 and 100),
    sex char(10),
    class int,
    score decimal (10,2) check(score between 0 and 10),
    time date
)
```

执行结果：

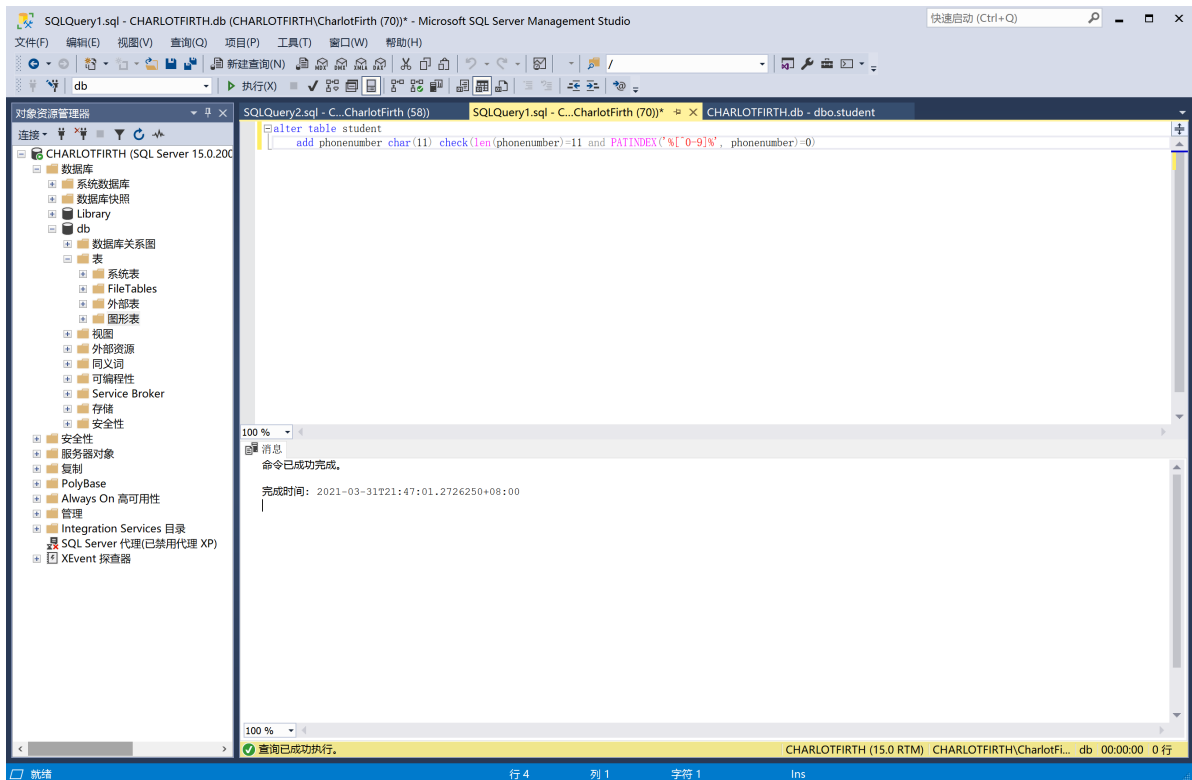


Q2

执行SQL语句

```
alter table student
    add phonenumber char(11) check(len(phonenumber)=11 and PATINDEX('%[^\0-9]%',
phonenumber)=0)
```

执行结果：

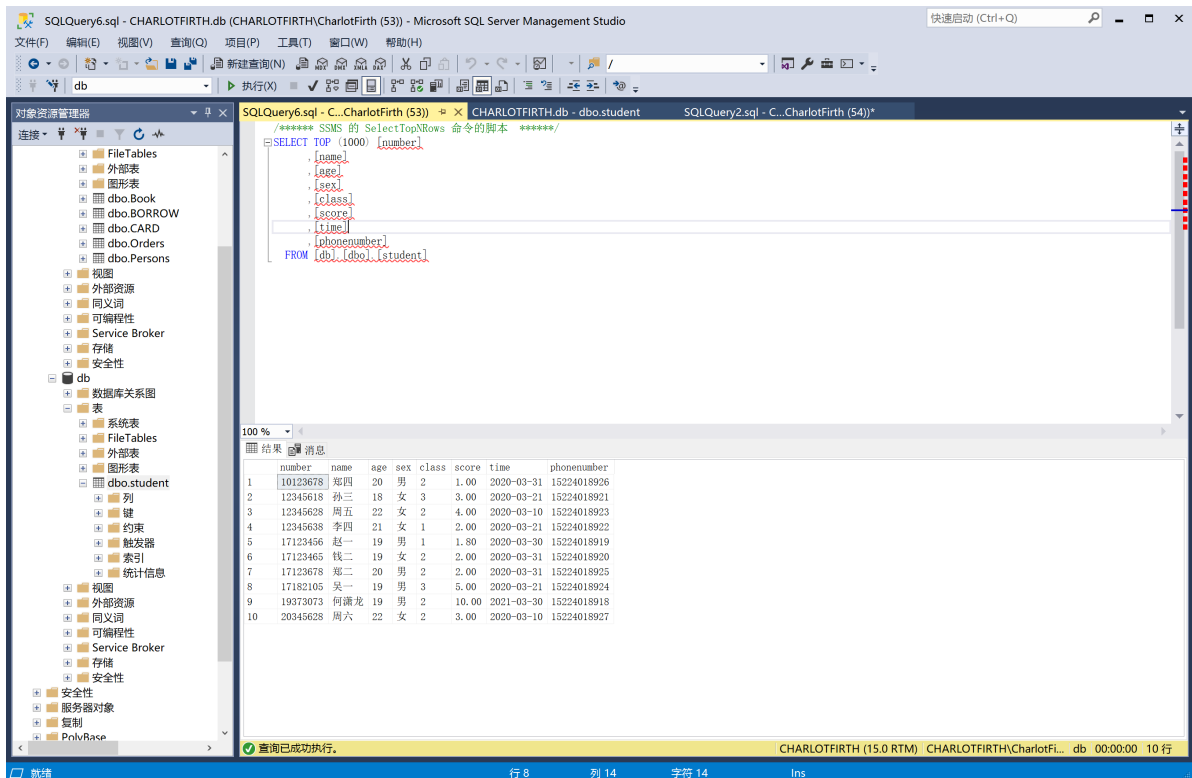
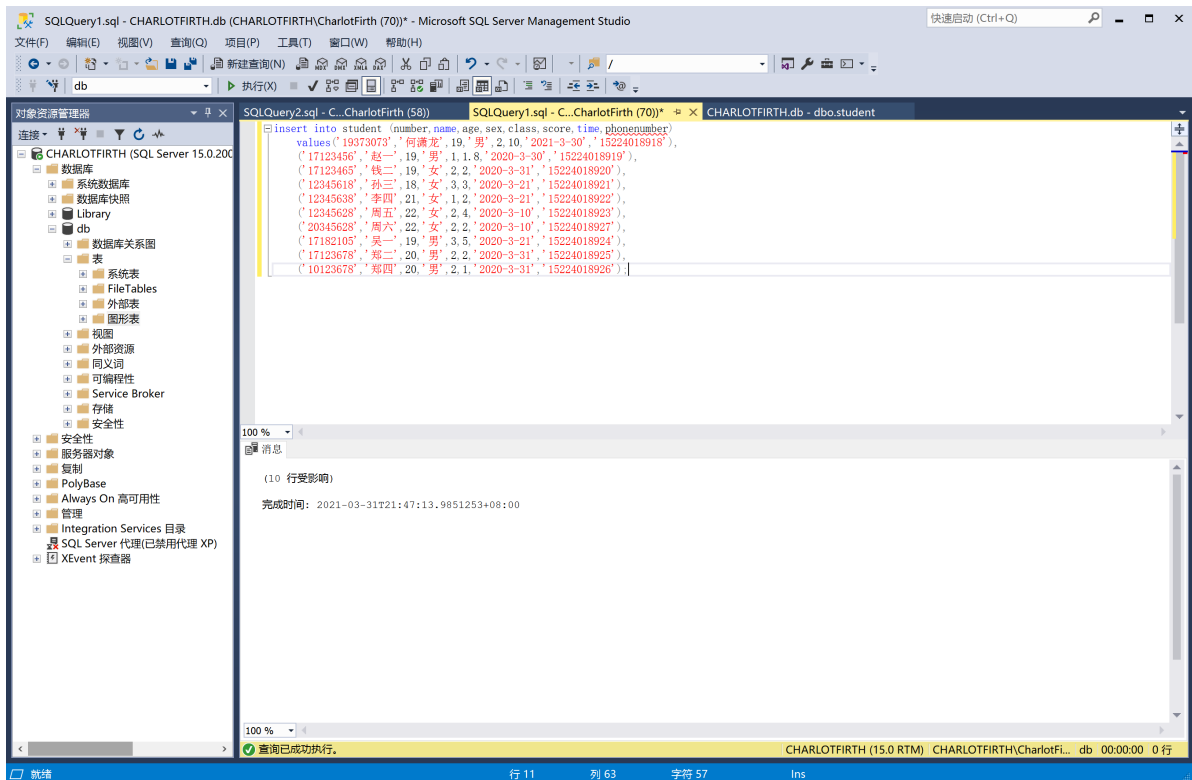


Q3

执行SQL语句

```
insert into student (number,name,age,sex,class,score,time,phonenummer)
values('19373073','何潇龙',19,'男',2,10,'2021-3-30','15224018918'),
('17123456','赵一',19,'男',1,1.8,'2020-3-30','15224018919'),
('17123465','钱二',19,'女',2,2,'2020-3-31','15224018920'),
('12345618','孙三',18,'女',3,3,'2020-3-21','15224018921'),
('12345638','李四',21,'女',1,2,'2020-3-21','15224018922'),
('12345628','周五',22,'女',2,4,'2020-3-10','15224018923'),
('20345628','周六',22,'女',2,2,'2020-3-10','15224018927'),
('17182105','吴一',19,'男',3,5,'2020-3-21','15224018924'),
('17123678','郑二',20,'男',2,2,'2020-3-31','15224018925'),
('10123678','郑四',20,'男',2,1,'2020-3-31','15224018926');
```

执行结果：



Q4

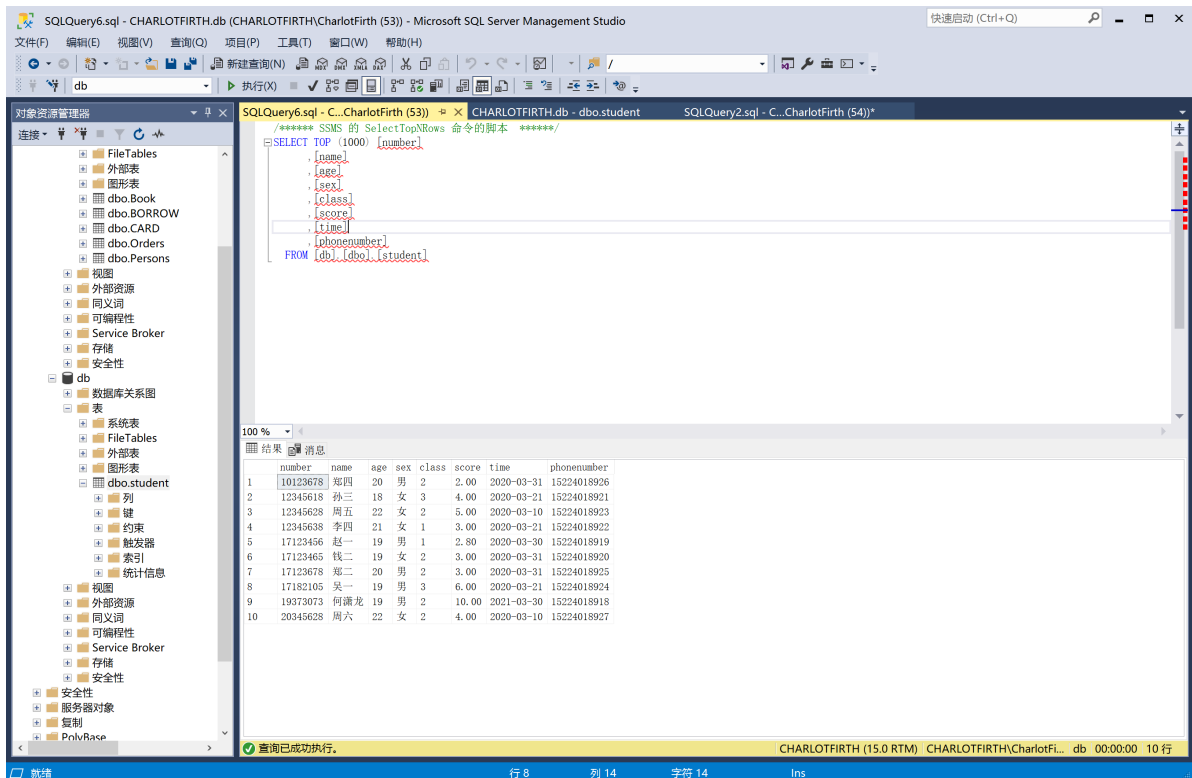
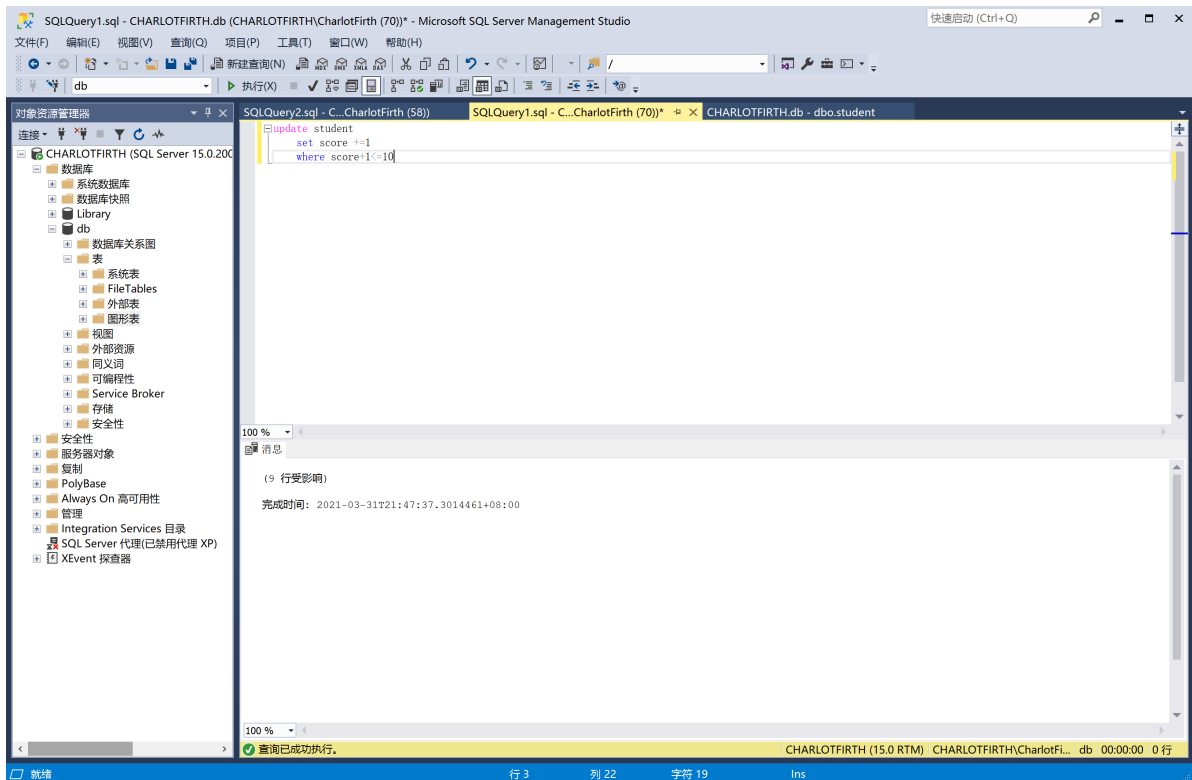
执行SQL语句

```

update student
set score +=1
where score+1<=10

```

执行结果：

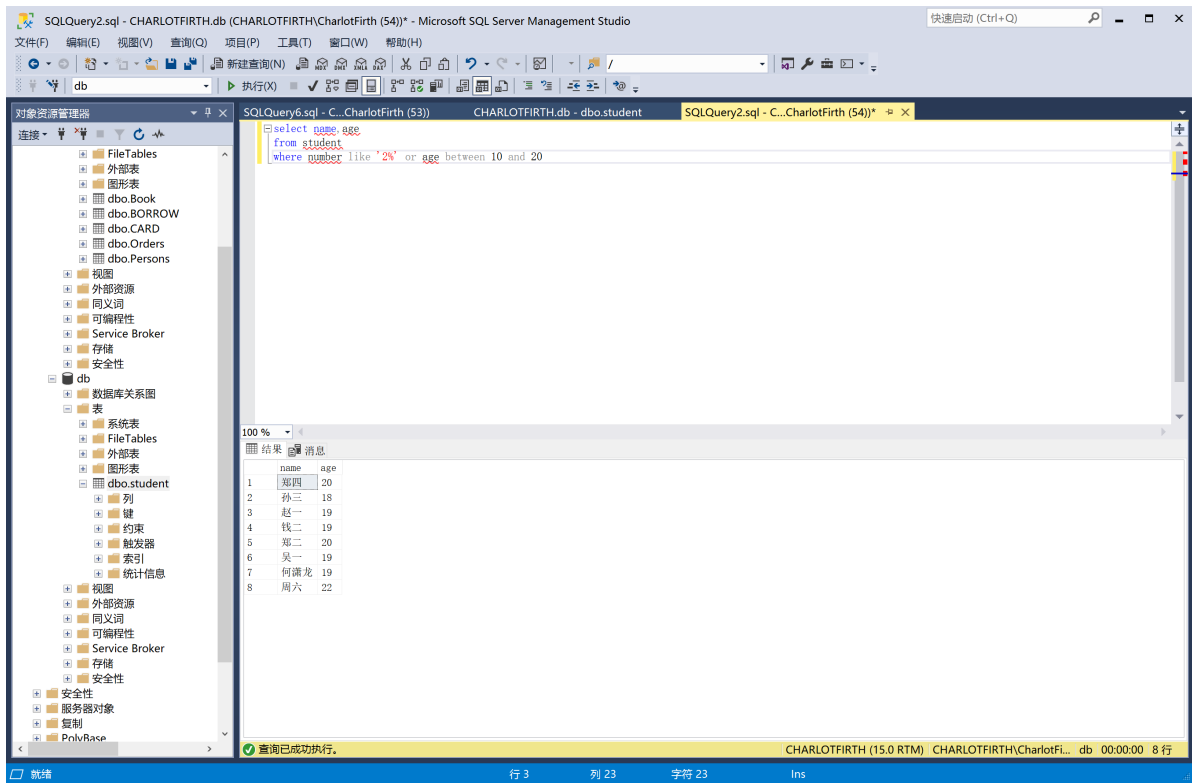


Q5

执行SQL语句

```
select name,age
from student
where number like '2%' or age between 10 and 20
```

执行结果:

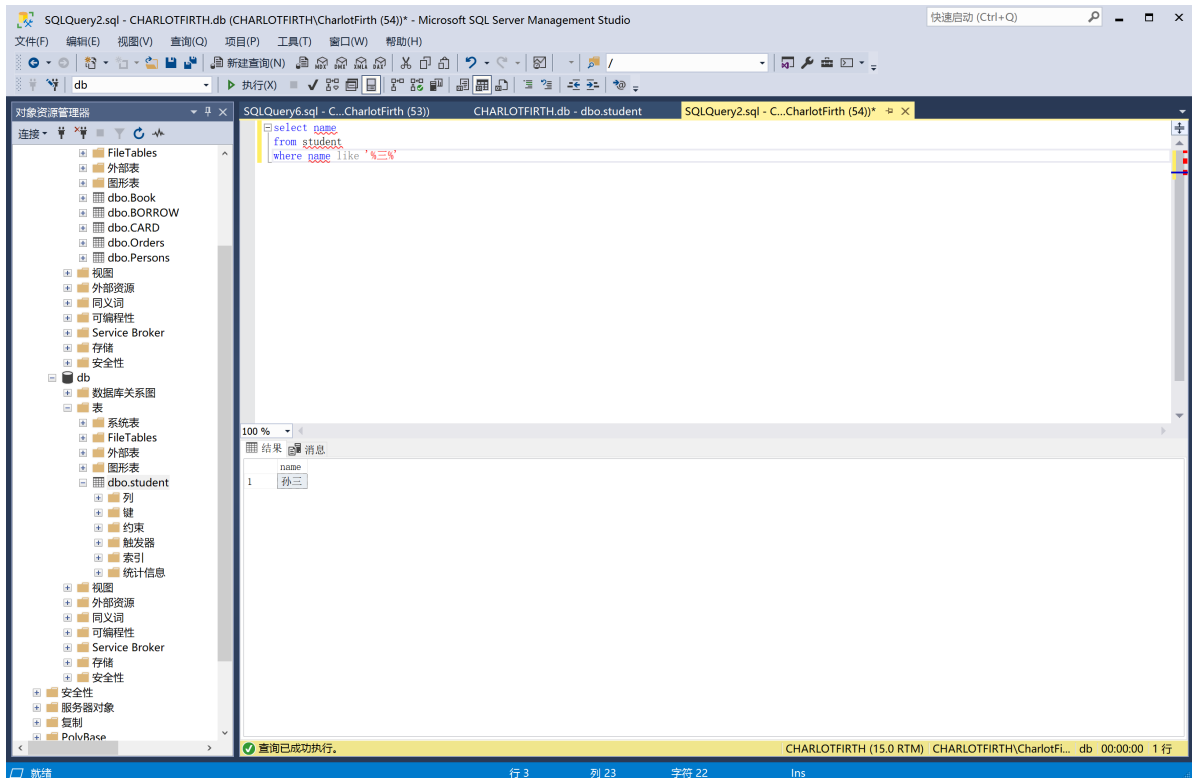


Q6

执行SQL语句

```
select name  
from student  
where name like '%三%'
```

执行结果：

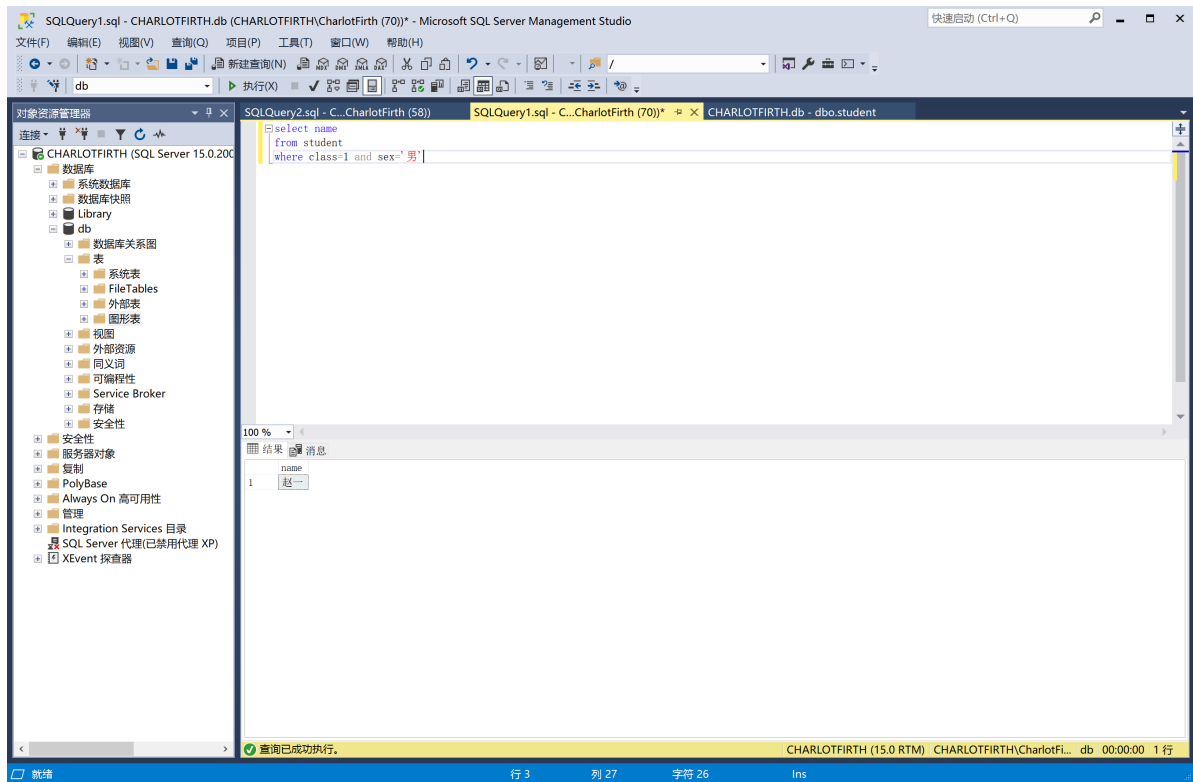


Q7

执行SQL语句

```
select name
from student
where class=1 and sex='男'
```

执行结果：

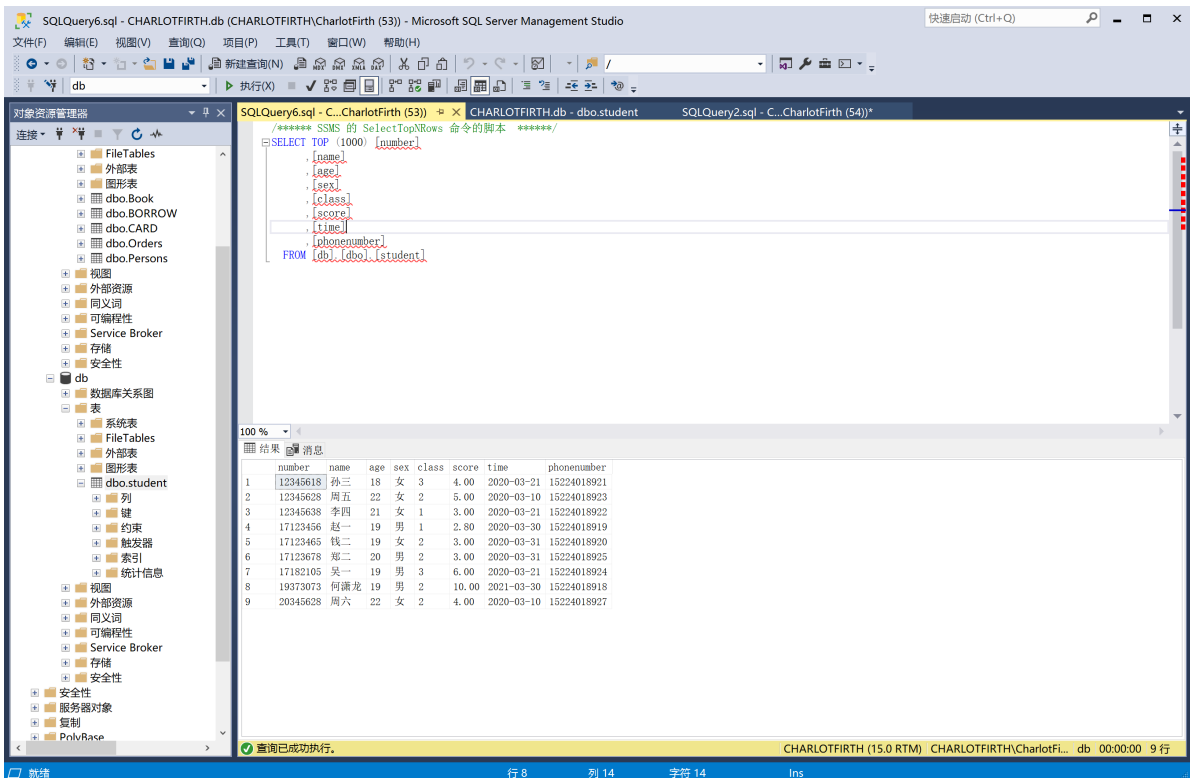
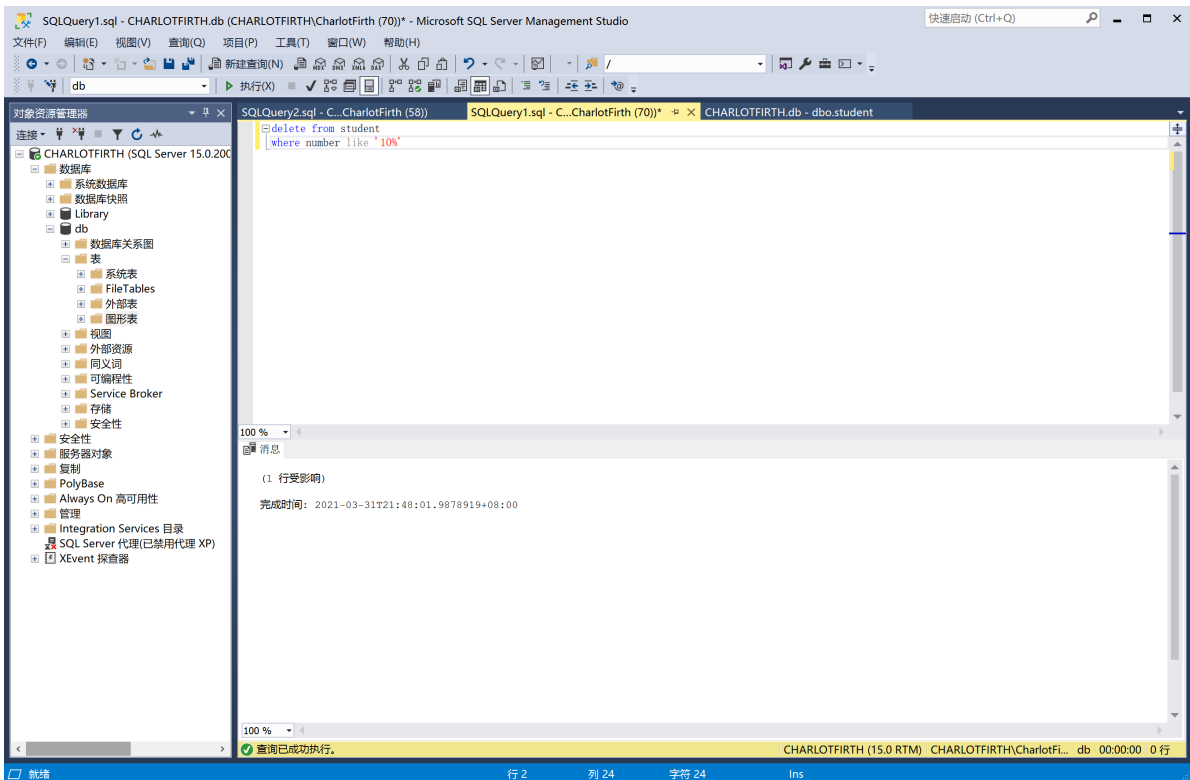


Q8

执行SQL语句

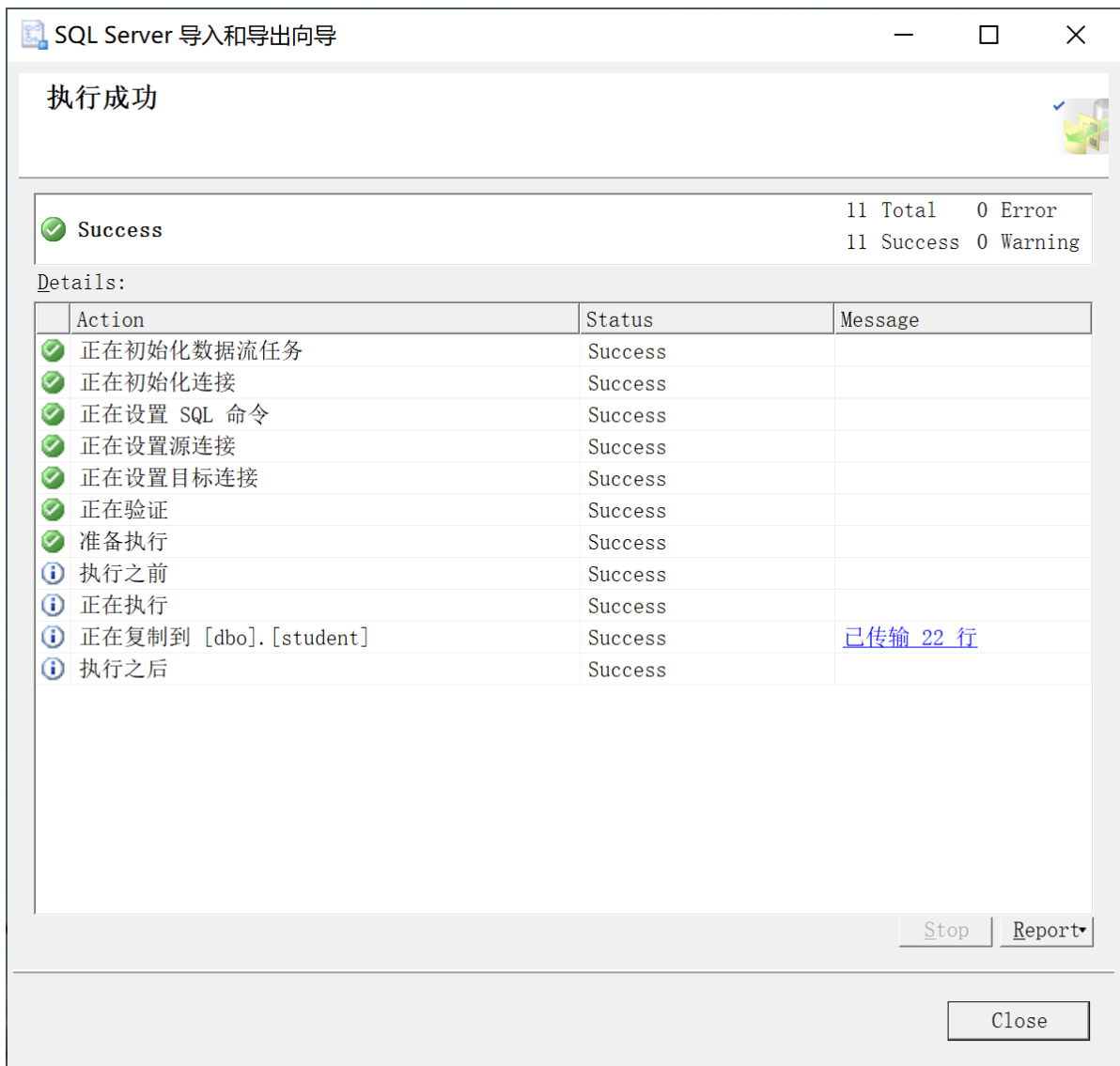
```
delete from student
where number like '10%'
```

执行结果：



TASK 2

数据导入:

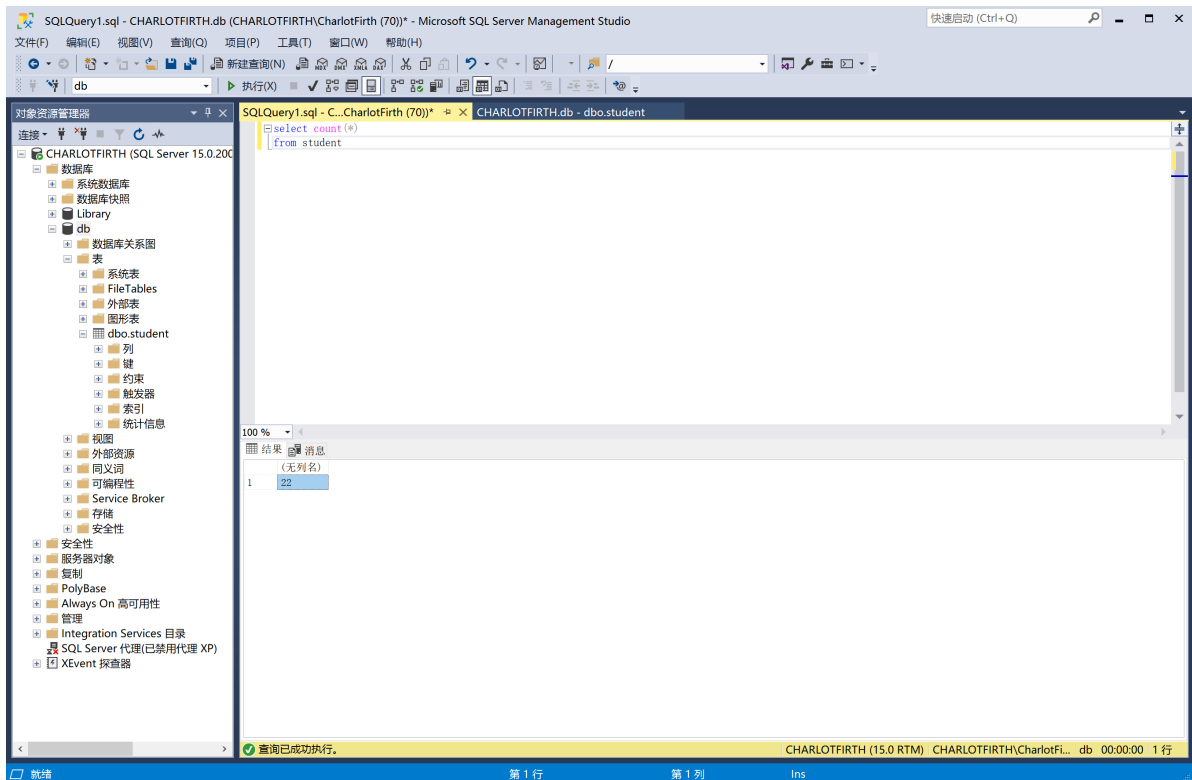


Q9

执行SQL语句

```
select count(*)  
from student
```

执行结果：

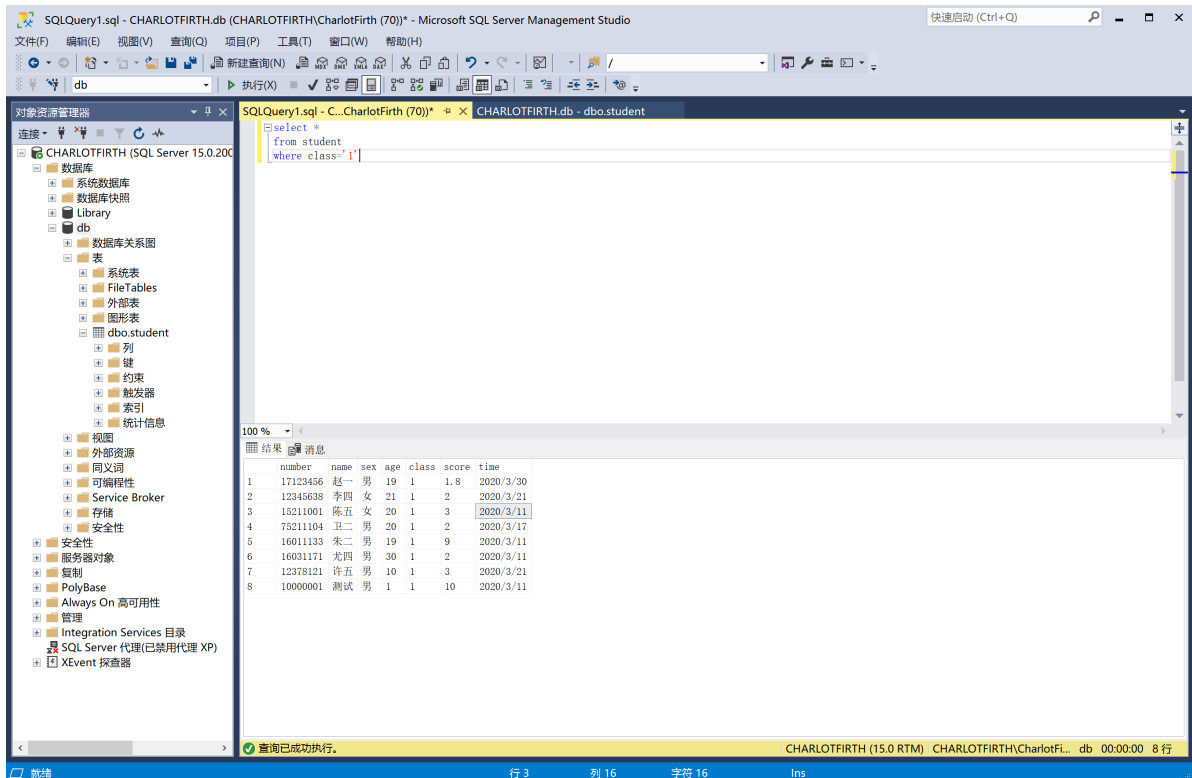


Q10

执行SQL语句

```
select *
from student
where class='1'
```

执行结果：



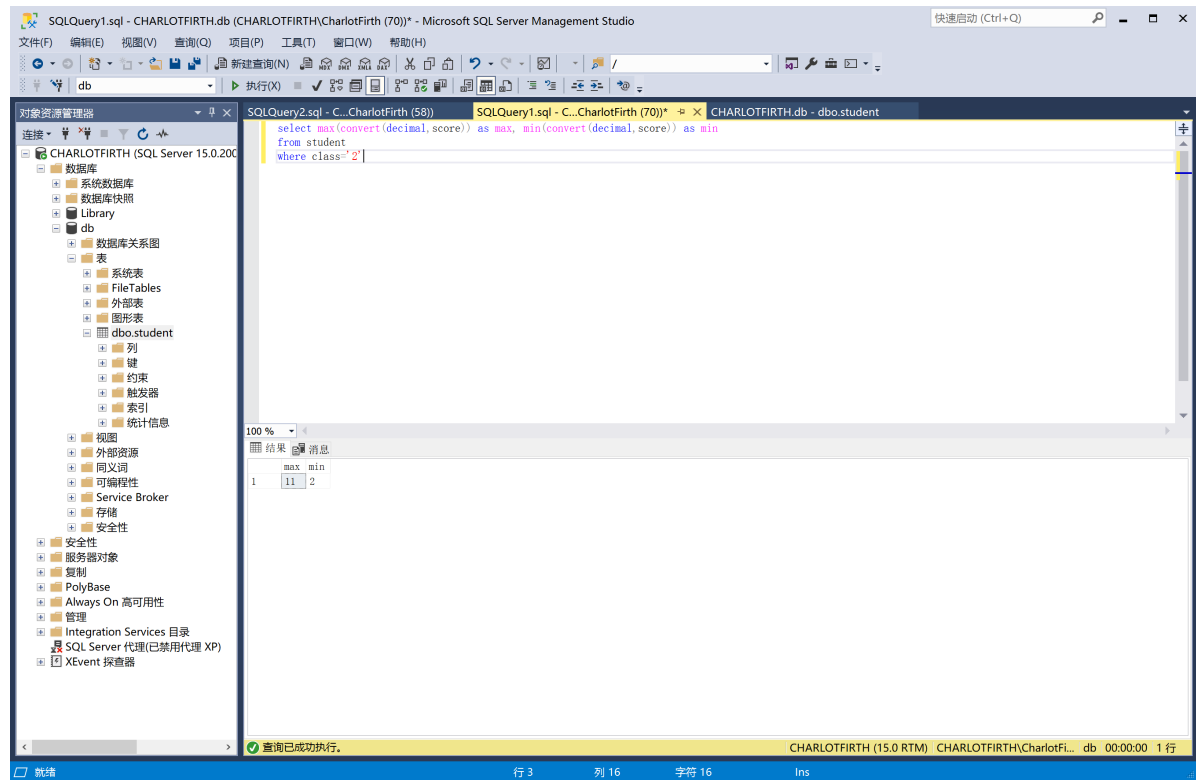
Q11

执行SQL语句

因为没有改数据类型所以得把字符串先转成数字

```
select max(convert(decimal,score)) as max, min(convert(decimal,score)) as min
from student
where class='2'
```

执行结果：



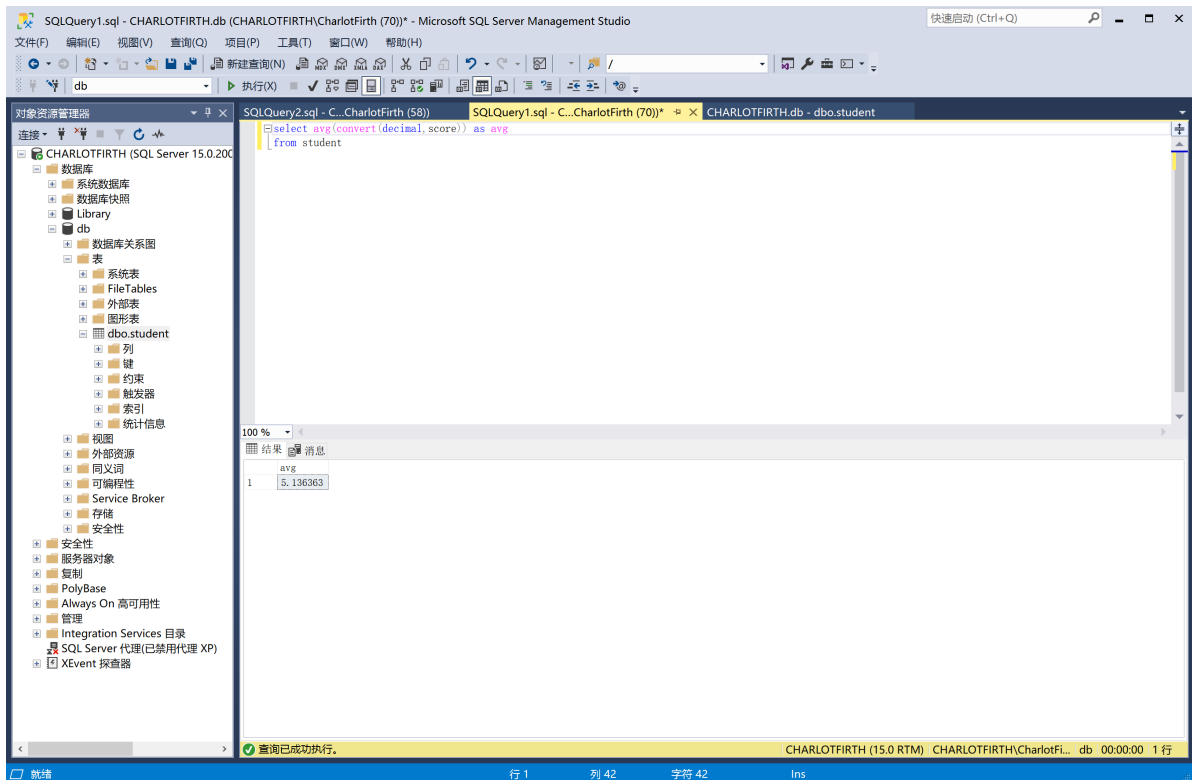
Q12

执行SQL语句

因为没有改数据类型所以得把字符串先转成数字

```
select avg(convert(decimal,score)) as avg
from student
```

执行结果：

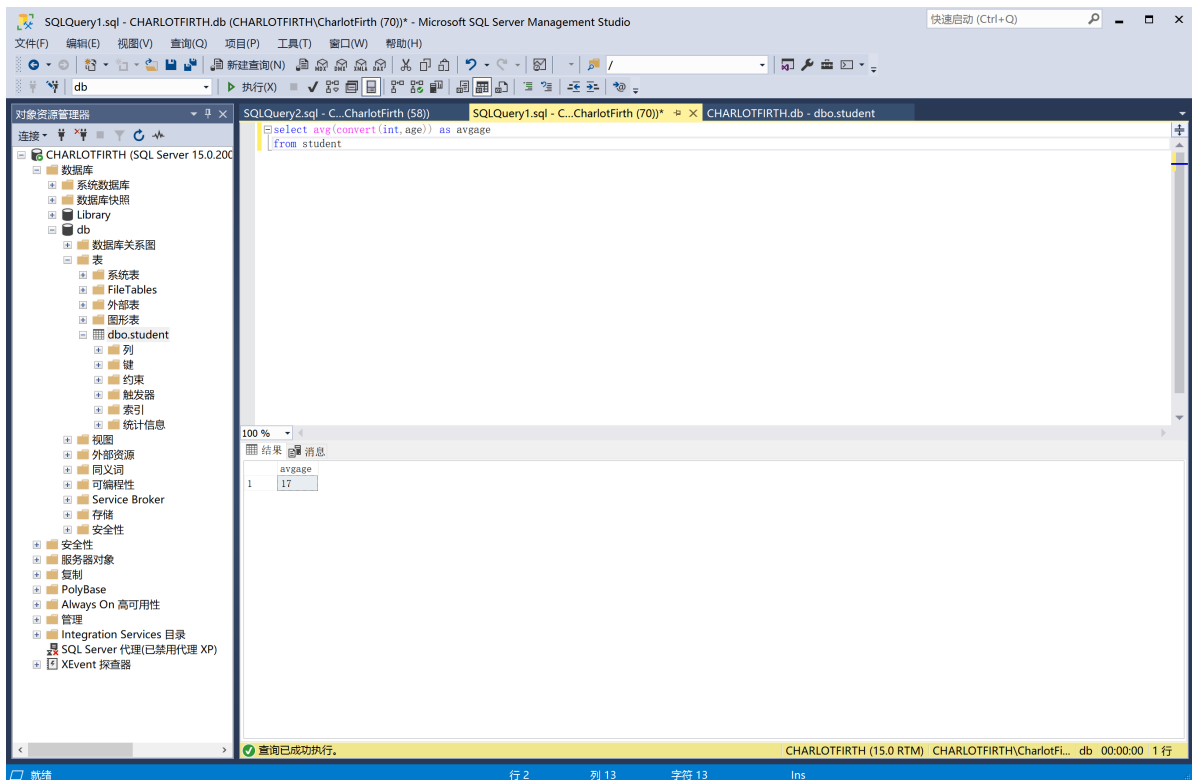


Q13

执行SQL语句

```
select avg(convert(int,age)) as avgage
from student
```

执行结果：



Q14

执行SQL语句

因为没有改过数据类型，所以先是字符串转日期再日期转字符串

```
select convert(char(10),convert(date,time,111),126) as  
year_month_day,convert(char(10),convert(date,time,111),112) as yearmonthday  
from student
```

执行结果：

The screenshot shows the Microsoft SQL Server Management Studio interface. The left pane displays the '对象资源管理器' (Object Explorer) for the 'CHARLOTFIRTH' database. The central pane shows the SQL query: `select convert(char(10),convert(date,time,111),126) as year_month_day,convert(char(10),convert(date,time,111),112) as yearmonthday from student`. The bottom pane displays the execution results in a table format.

	year_month_day	yearmonthday
1	2020-03-30	20200330
2	2020-03-31	20200331
3	2020-03-21	20200321
4	2020-03-21	20200321
5	2020-03-10	20200310
6	2020-03-21	20200321
7	2020-03-31	20200331
8	2020-03-21	20200321
9	2020-03-21	20200321
10	2020-03-11	20200311
11	2020-03-11	20200311
12	2020-03-17	20200317
13	2020-03-11	20200311
14	2020-03-11	20200311
15	2020-03-11	20200311
16	2020-03-11	20200311
17	2020-03-11	20200311

At the bottom, a status bar indicates: '查询已成功执行。 CHARLOTFIRTH (15.0 RTM) CHARLOTFIRTH\CharlotFi... db 00:00:00 22 行'.