数据库实验二

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实验任务
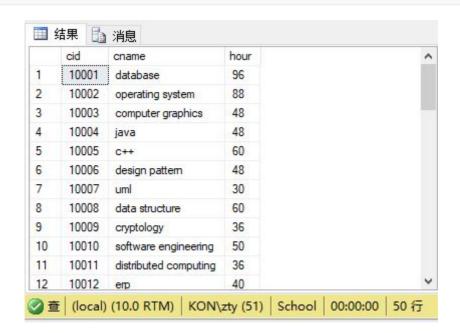
在school数据库中：
(1)查询全部课程的详细记录
(2)查询所有有选修课的学生的编号
(3)查询课时<88(小时)的课程的编号
(4)请找出总分超过400分的学生
(5)查询课程的总数
(6)查询所有课程和选修该课程的学生总数
(7)查询选修成绩超过60的课程超过两门的学生编号
(8)统计各个学生的选修课程数目和平均成绩
(9)查询选修Java的所有学生的编号及姓名
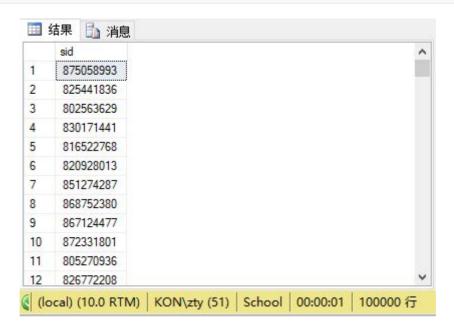(10)查询姓名为ssht的学生所选的课程的编号和成绩
(11)查询其他课时比课程C++多的课程的名称

解决方案

(1)

```
use School
select *
from COURSES
```


(2)

```
use School
select distinct STUDENTS.sid
from CHOICES,STUDENTS
where CHOICES.sid=STUDENTS.sid
```
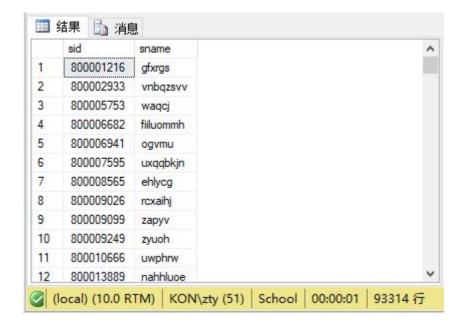
	sid
1	875058993
2	825441836
3	802563629
4	830171441
5	816522768
6	820928013
7	851274287
8	868752380
9	867124477
10	872331801
11	805270936
12	826772208

(local) (10.0 RTM) | KON\zty (51) | School | 00:00:01 | 100000 行

(3)

```
use School
select cid
from COURSES
where COURSES.hour<88
```

	cid
1	10003
2	10004
3	10005
4	10006
5	10007
6	10008
7	10009
8	10010
9	10011
10	10012
11	10013
12	10014

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(4)

```
use School
select sid,sname
from STUDENTS
where STUDENTS.grade>400
```
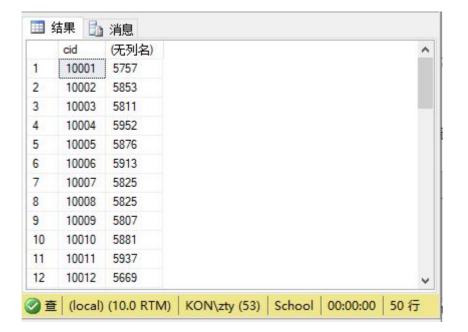
(5)

```
use School
select COUNT(distinct cid)
from COURSES
```


(6)

```
use School
select cid,COUNT(distinct STUDENTS.sid)
from CHOICES,STUDENTS
where CHOICES.sid=STUDENTS.sid
group by CHOICES.cid
```

(7)

```
use School
select STUDENTS.sid
from CHOICES,STUDENTS
where CHOICES.sid=STUDENTS.sid and grade>60
group by STUDENTS.sid
having COUNT(*)>2
```
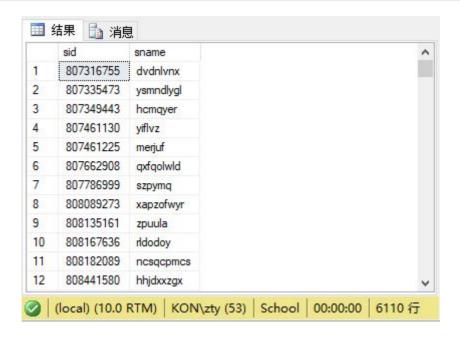

(8)

```
use School
select STUDENTS.sid ,COUNT(cid) as course_cnt,AVG(score) as avg_score
from CHOICES,STUDENTS
where CHOICES.sid=STUDENTS.sid
group by STUDENTS.sid
```

	sid	course_cnt	avg_score
1	875058993	3	78
2	872331801	4	87
3	820928013	4	74
4	802563629	2	66
5	830171441	2	80
6	868752380	5	80
7	867124477	2	92
8	816522768	3	74
9	851274287	4	87
10	825441836	4	73
11	820970361	3	66
12	805270936	1	NULL

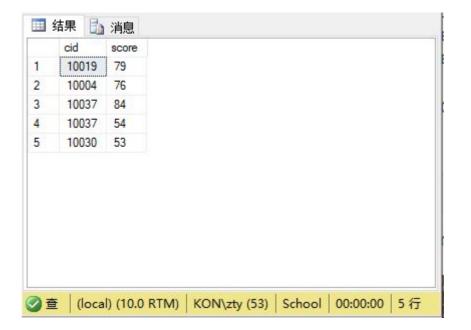(local) (10.0 RTM) | KON\zty (53) | School | 00:00:01 | 100000 行

(9)

```
use School
select STUDENTS.sid,sname
from CHOICES,STUDENTS,COURSES
where cname='Java' and CHOICES.sid = STUDENTS.sid and COURSES.cid = CHOICES.cid
```


	sid	sname
1	807316755	dvdnlvnx
2	807335473	ysmndlygl
3	807349443	hcmqyer
4	807461130	yiflvz
5	807461225	merjuf
6	807662908	qxfqolwld
7	807786999	szpymq
8	808089273	xapzofwyr
9	808135161	zpuula
10	808167636	rldodoy
11	808182089	ncsqcpmcs
12	808441580	hhjdxxzgx

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(10)

```
use School
select CHOICES.cid,CHOICES.score
from CHOICES,STUDENTS
where STUDENTS.sname='sssht' and CHOICES.sid = STUDENTS.sid
```

(11)

```
use School
select COURSES.cname
from COURSES
where COURSES.hour>(select COURSES.hour from COURSES where COURSES.cname='c++')
```