数据库实验三

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实验任务

在school数据库中：
(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
(2)找出和学生883794999或学生850955252的年级一样的学生的姓名
(3)查询没有选修Java的学生名称
(4)找出课时最少的课程的详细信息
(5)查询工资最高的教师的编号和开设的课程号
(6)找出选修课程ERP成绩最高的学生编号
(7)查询没有学生选修的课程名称
(8)查询讲授课程UML的教师所讲授的所有课程名称
(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
(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

解决方案

(1)

```
use School
select sid,sname
from STUDENTS
where sid in(
select sid
from CHOICES C
where cid=(select cid
          from COURSES
          where cname='c++')
      and score>(
      select score
      from CHOICES
      where cid=C.cid and sid=(select sid -- cid=C.cid保证课程为C++
                              from STUDENTS
                              where sname='znkoo' )))
```

结果 消息

	sid	sname
1	800252989	kmyvwv
2	800445090	lqrpitvn
3	800909046	rsvaas
4	801485938	iazkic
5	801522995	mijmgdj
6	802666377	gtehbpu
7	803020425	ychpec
8	803125255	nxemchcrt
9	803791780	xdirbs
10	803918636	rqblpymp
11	804525382	zekhaaa
12	804528879	djbkejk

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(2)

```
use School
select sname
from STUDENTS
where grade in(select grade
                from STUDENTS
                where sid='883794999' or sid='850955252')
```

结果 消息

	sname
1	uxqqbkjn
2	hvylafcj
3	vocojjnml
4	ztozk
5	efmgfprz
6	pgmrkdhh
7	ttyyb
8	mcefjr
9	rlmbgu
10	nkdnfq
11	gmxesrhv
12	fbbiyeh

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(3)

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

结果 消息

	sname
1	siwoa
2	dcoixka
3	pxqkfty
4	xbjihyvyb
5	ovuya
6	rgysrgwb
7	dulsp
8	sssij
9	fathxcrf
10	qbchkoxqi
11	mhtoc
12	ewcyqifmz

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(4)

```
use School
select *
from COURSES
where hour<=all(select hour
                from COURSES)
```

结果 消息

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

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(5)

```
use School
select tid,cid
from CHOICES
where tid in(select tid
             from TEACHERS
             where salary in(select max(salary)
                             from TEACHERS))
```

结果 消息

	tid	cid
1	204711560	10032
2	204711560	10017
3	277877392	10041
4	204711560	10001
5	204711560	10026
6	287866460	10005
7	277877392	10047
8	214445507	10022
9	287866460	10012
10	214445507	10003
11	287866460	10048
12	204711560	10042

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(6)

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

结果 消息

	sid
1	862976650
2	840891316
3	844440501
4	883884237
5	871790824
6	871923399
7	850185316
8	804483690
9	844447081
10	826003101
11	834280136
12	887846486

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(7)

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

结果 消息

cname

查询已成功执行。 (local) (10.0 RTM) KON\zty (53) School 00:00:00 0 行

(8)

```
use School
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')))
```

结果 消息

	cname
1	algorithm
2	architectonics
3	artifical intelligence
4	asp
5	basic
6	c
7	c#
8	c++
9	c++/stl programming
10	cobol
11	compiling principle
12	computer graphics

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(9)

```
use School
(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'))
```

结果 消息

	sid
1	800432697
2	802445853
3	805916031
4	808872915
5	813559934
6	816025343
7	816840832
8	818314833
9	819632378
10	827126907
11	835171985
12	836928859

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(10)

```
use School
(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'))
```

结果 消息

	sid
1	800099878
2	800126924
3	800269666
4	800354788
5	800721627
6	800799419
7	800991189
8	801150696
9	801208471
10	801266016
11	801407246
12	801512934

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