

实验报告3-20301174-万兴全

数据操作详细过程（包含SQL命令及执行结果展示）。

本次作业满分为40分，每题5分。

使用SQL命令执行如下操作：

(1) 创建视图Grade_View显示所有同学的选课及成绩情况，列出学生的学号、姓名、班号、课程名称和成绩。

```
create view Grade_View as
select student.SNO,student.SNAME,student.CLASSNO,CNAME ,sc.grade
from student,course ,sc
where sc.cno=course.cno and sc.sno=student.sno;
```



	SNO	SNAME	CLASSNO	CNAME	GRADE
1	20300100	田邦仪	RJ2004	数据库系统	67
2	20300148	赵心砚	RJ2005	数据库系统	58
3	20300150	杨青	RJ2005	数据库系统	89
4	20300160	杨玲玲	RJ2006	数据库系统	71
5	20300012	葛畅	RJ2001	数据结构	88
6	20300015	刘晶	RJ2001	数据结构	<null>
7	20300020	杨敏	RJ2001	数据结构	91
8	20300030	胡贤斌	RJ2001	数据结构	78
9	20300048	赵鸿泽	RJ2002	数据结构	97

(2) 在视图Grade_View中查询“软件2001”班的同学的选课及成绩情况，显示学号、姓名、课程名称、成绩

```
select sno,sname,cname,grade
from Grade_View
where CLASSNO='RJ2001';
```

228	✓	select sno,sname,cname,grade
229		from Grade_View
230		where CLASSNO='RJ2001';
231		
232		--3

SNO	SNAME	CNAME	GRADE
1 20300012	葛畅	数据结构	88
2 20300015	刘晶	数据结构	<null>
3 20300020	杨敏	数据结构	91
4 20300030	胡贤斌	数据结构	78

(3) 在视图Grade_View中插入如下元组: 20300010, 李在, 软件2001, 数据库系统, 88 (此为不成功的操作)。查询视图或基表记录验证视图操作。

```
insert into Grade_View values (20300010,'李在','RJ2001','数据库系统',88);
```

233	!	insert into Grade_View values (20300010,'李在','RJ2001','数据库系统',88);
[42000][1779] ORA-01779: 无法修改与非键值保存表对应的列 Position: 0		

```
select * from Grade_View;
```

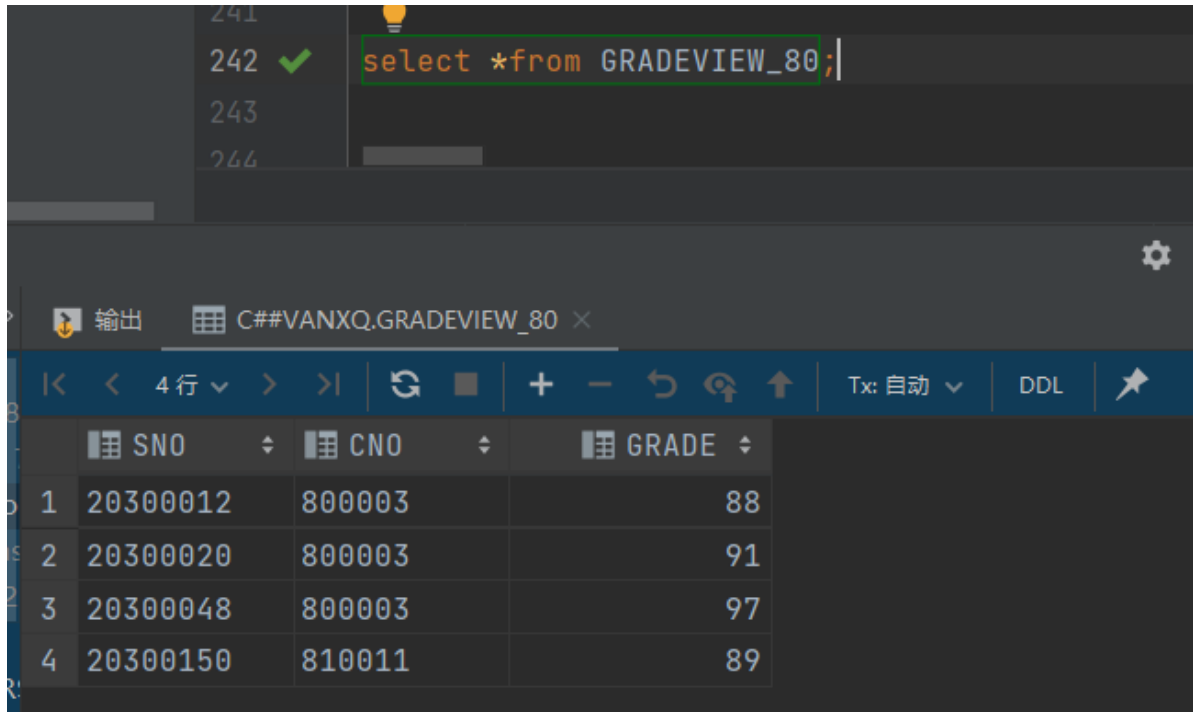
232	--3
233	insert into Grade_View values (20300010,'李在','RJ2001','数据库系统',88);
234	
235	✓ select * from Grade_View;
236	

SNO	SNAME	CLASSNO	CNAME	GRADE
1 20300100	田邦仪	RJ2004	数据库系统	67
2 20300148	赵心砚	RJ2005	数据库系统	58
3 20300150	杨青	RJ2005	数据库系统	89
4 20300160	杨玲玲	RJ2006	数据库系统	71
5 20300012	葛畅	RJ2001	数据结构	88
6 20300015	刘晶	RJ2001	数据结构	<null>
7 20300020	杨敏	RJ2001	数据结构	91
8 20300030	胡贤斌	RJ2001	数据结构	78
9 20300048	赵鸿泽	RJ2002	数据结构	97

(4) 创建视图GradeView_80, 用于存放成绩高于80分 (含80) 的选课信息, 显示学号、课程号和成绩, 使用with check option选项。查询视图或基表记录验证视图操作。

```
create view GradeView_80 as
select sno,cno,grade
from sc
where grade>=80
with check option ;

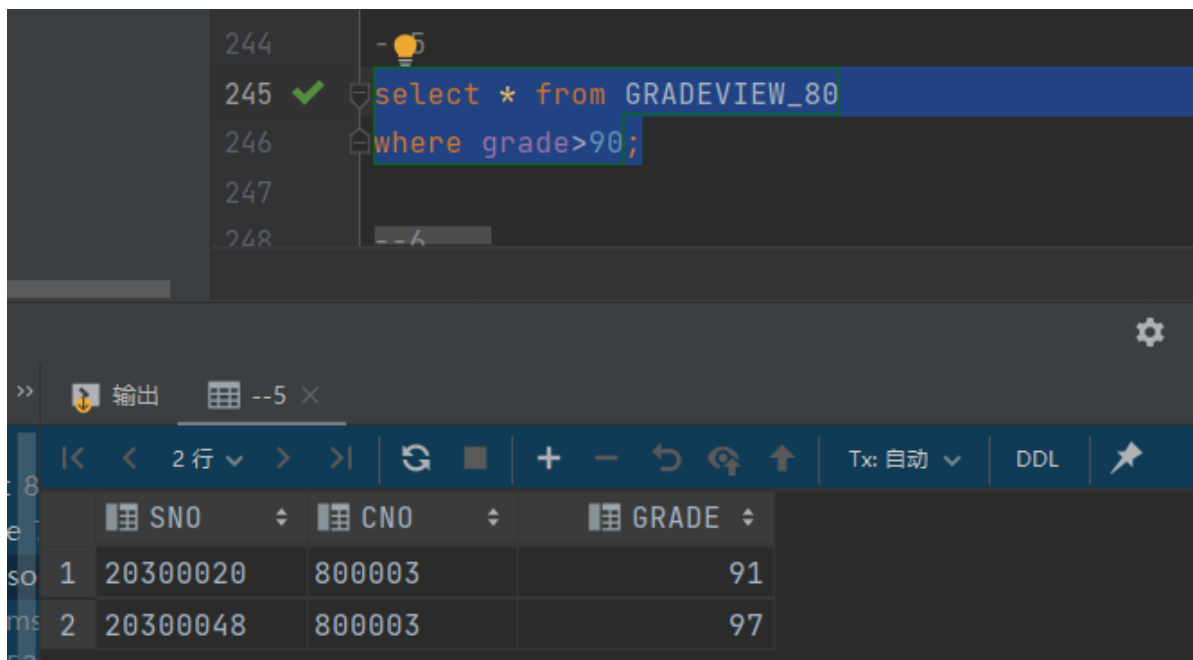
select *from GRADEVIEW_80;
```



	SNO	CNO	GRADE
1	20300012	800003	88
2	20300020	800003	91
3	20300048	800003	97
4	20300150	810011	89

(5) 在视图GradeView_80中查询成绩高于90的选课信息。

```
select * from GRADEVIEW_80
where grade>90;
```

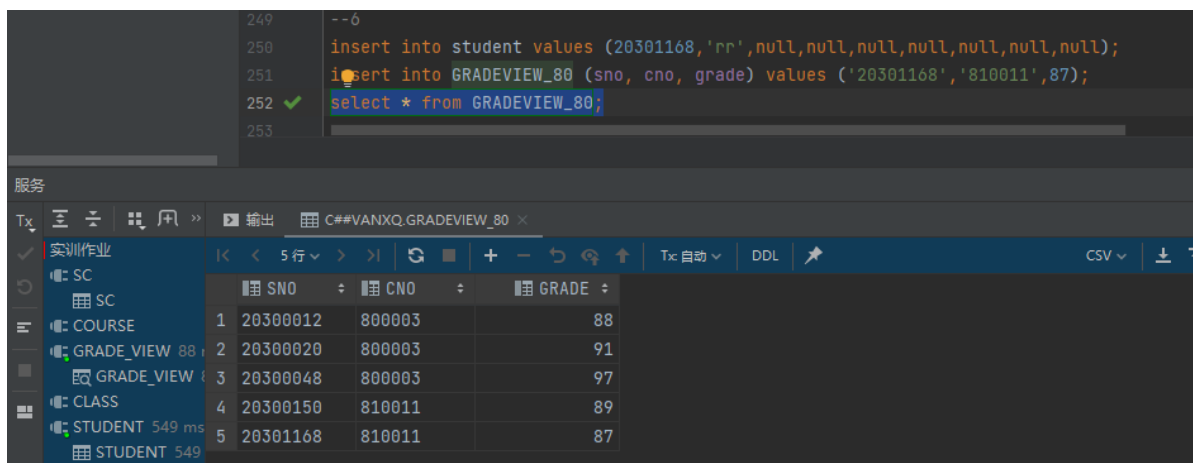


	SNO	CNO	GRADE
1	20300020	800003	91
2	20300048	800003	97

(6) 在视图GradeView_80中依次插入如下元组：

20301168, 810011, 87 (可插入成功)

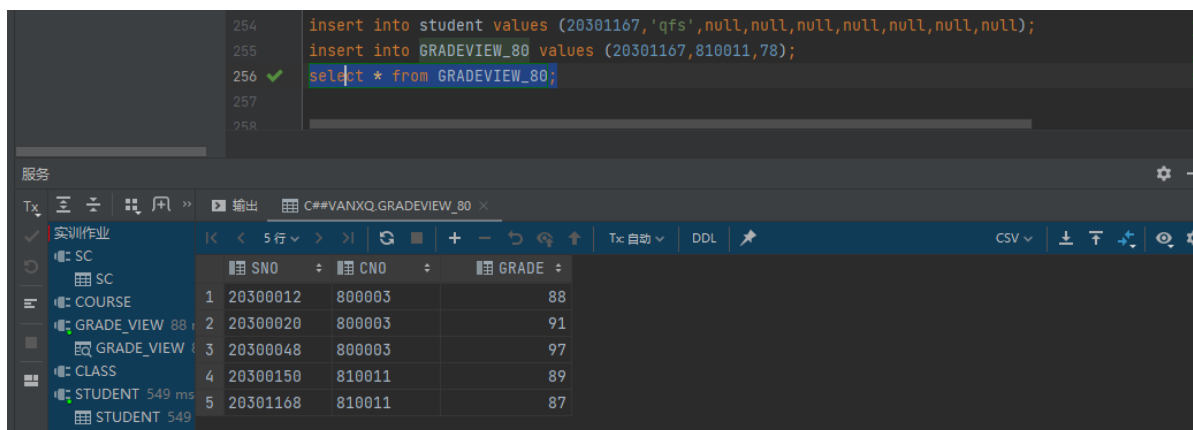
```
insert into student values (20301168,'rr',null,null,null,null,null,null,null);
insert into GRADEVIEW_80 (sno, cno, grade) values ('20301168','810011',87);
select * from GRADEVIEW_80;
```



SNO	CNO	GRADE
20300012	800003	88
20300020	800003	91
20300048	800003	97
20300150	810011	89
20301168	810011	87

20301167, 810011, 78 (插入不成功)

```
insert into student values (20301167,'qfs',null,null,null,null,null,null,null);
insert into GRADEVIEW_80 values (20301167,810011,78);
select * from GRADEVIEW_80;
```



SNO	CNO	GRADE
20300012	800003	88
20300020	800003	91
20300048	800003	97
20300150	810011	89
20301168	810011	87

查询视图或基表记录验证视图操作。

(7) 在视图GradeView_80中依次修改如下元组

将 (20301168, 810011) 所对应的成绩改为90; (可修改成功)

```
UPDATE GRADEVIEW_80
SET GRADE = 90
WHERE SNO = '20301168' AND CNO = '810011' ;
select * from GRADEVIEW_80;
```

```

258
259 UPDATE GRADEVIEW_80
260 SET GRADE = 90
261 WHERE SNO = '20301168' AND CNO = '810011';
262 select * from GRADEVIEW_80;
263

```

SNO	CNO	GRADE
1	20300012	800003
2	20300020	800003
3	20300048	800003
4	20300150	810011
5	20301168	810011

将 (20301168, 810011) 所对应的成绩改为70; (修改不成功)

```

UPDATE GRADEVIEW_80
SET GRADE = 70
WHERE SNO = '20301168' AND CNO = '810011';
select * from GRADEVIEW_80;

```

```

264 UPDATE GRADEVIEW_80
265 SET GRADE = 70
266 WHERE SNO = '20301168' AND CNO = '810011';
267 select * from GRADEVIEW_80;

```

SNO	CNO	GRADE
1	20300012	800003
2	20300020	800003
3	20300048	800003
4	20300150	810011

查询视图或基表记录验证视图操作。

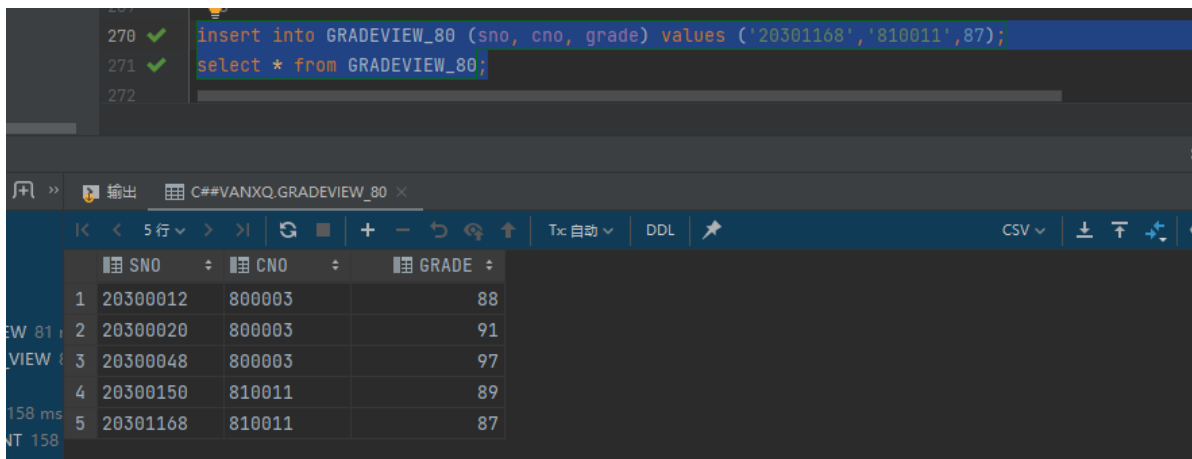
(8) 在视图GradeView_80中删除如下元组: sno=20301168, cno=810011。

查询视图或基表记录验证视图操作。

```

insert into GRADEVIEW_80 (sno, cno, grade) values ('20301168', '810011', 87);
select * from GRADEVIEW_80;

```

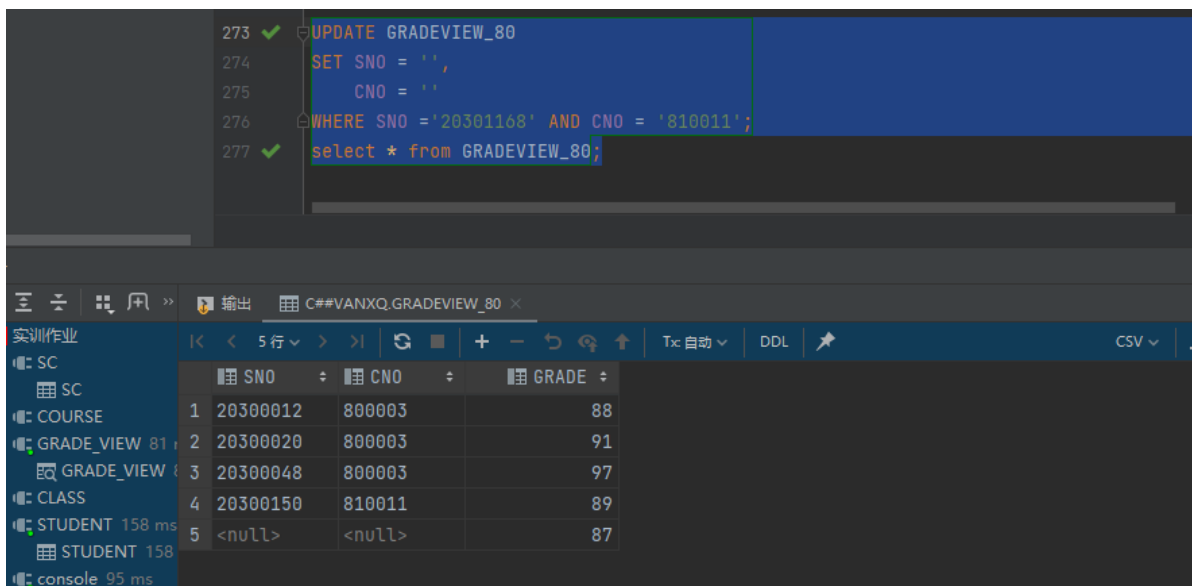


至于删除，不知是哪种情况，我把两种我的想法列出来

```

--第一种
UPDATE GRADEVIEW_80
SET SNO = '',
    CNO = ''
WHERE SNO ='20301168' AND CNO = '810011';
select * from GRADEVIEW_80;

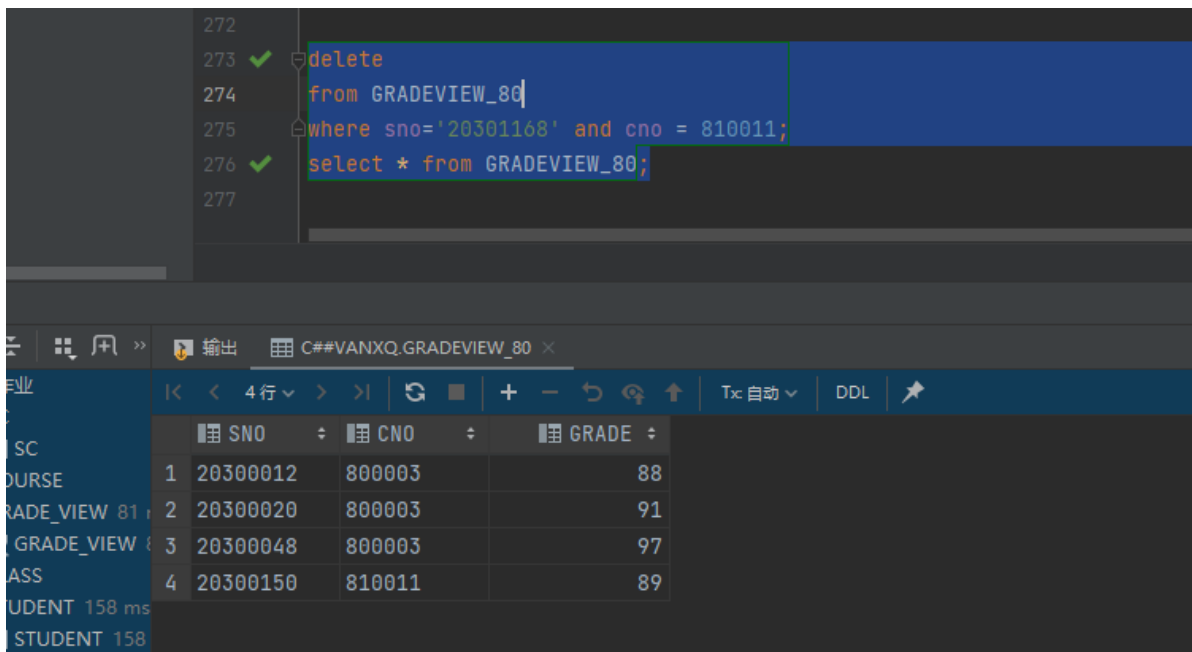
```



```

--第二种
delete
from GRADEVIEW_80
where sno='20301168' and cno = 810011;
select * from GRADEVIEW_80;

```



附 本实验报告源代码

```

--第三次实验报告

--1
create view Grade_View as
    select student.SNO,student.SNAME,student.CLASSNO,CNAME ,sc.grade
    from student,course ,sc
    where sc.cno=course.cno and sc.sno=student.sno;

--2
select sno,sname,cname,grade
from Grade_View
where CLASSNO='RJ2001';

--3
insert into Grade_View values (20300010,'李在','RJ2001','数据库系统',88);

select * from Grade_View;

--4
create view GradeView_80 as
    select sno,cno,grade
    from sc
    where grade>=80;

select *from GRADEVIEW_80;

--5
select * from GRADEVIEW_80
where grade>90;

--6
insert into student values (20301168,'rr',null,null,null,null,null,null,null);

```

```
insert into GRADEVIEW_80 (sno, cno, grade) values ('20301168','810011',87);
select * from GRADEVIEW_80;

insert into student values (20301167,'qfs',null,null,null,null,null,null);
insert into GRADEVIEW_80 values (20301167,810011,78);
select * from GRADEVIEW_80;

--7
UPDATE GRADEVIEW_80
SET GRADE = 90
WHERE SNO = '20301168'AND CNO = '810011' ;
select * from GRADEVIEW_80;

UPDATE GRADEVIEW_80
SET GRADE = 70
WHERE SNO = '20301168'AND CNO = '810011' ;
select * from GRADEVIEW_80;

--8
insert into GRADEVIEW_80 (sno, cno, grade) values ('20301168','810011',87);
select * from GRADEVIEW_80;

UPDATE GRADEVIEW_80
SET SNO = '',
    CNO = ''
WHERE SNO ='20301168' AND CNO = '810011';
select * from GRADEVIEW_80;
```