

第三章 补充习题 3-4

李梓童 2017202121

编程要求： 实现视图查询语句转换

使用说明：

#0 内置视图如下：

```
create view Student_Course
```

```
as select s.Sno, s.Name, c.Course_no, Title
```

```
from Students s, SC e, Courses c
```

```
where s.Sno = e.Sno and e.Course_no = c.Course_no
```

#1 对话框打印出 “Please enter SQL request:” 语句后，用户可以键入相应的 SQL 嵌套语句。注：所有语句请在一行中输入。

```
Please enter SQL request:
select * from Student_Course where Sno = X
TRANSFORMED: select s.Sno, s.Name, c.Course_no, Title from Students s, SC e, Courses c where s.Sno = e.Sno and e.Course_no = c.Course_no and Sno = X ;
```

#2/3 支持原生词 (select\from\where\and\in) 的大写和小写，以及支持投影视图中的一个或多个属性输出。

```
Please enter SQL request:
SELECT s.Sno, s.Name FROM Student_Course where Sno = X
TRANSFORMED: select s.Sno, s.Name from Students s, SC e, Courses c where s.Sno = e.Sno and e.Course_no = c.Course_no and Sno = X ;
```

```
Please enter SQL request:
select s.Sno from Student_Course where Sno = X
TRANSFORMED: select s.Sno from Students s, SC e, Courses c where s.Sno = e.Sno and e.Course_no = c.Course_no and Sno = X ;
```

#4 检查视图是否存在。

```
Please enter SQL request:
select s.Sno, s.Name from Stu_Cou where Sno = X
The View Is Not Created.
```

#5 允许查询属性前不带基本表名（默认前提是视图创建时各基本表的属性名无重名）。

```
Please enter SQL request:
select Sno, Name from Student_Course where Sno = X
TRANSFORMED: select s.Sno, s.Name from Students s, SC e, Courses c where s.Sno = e.Sno and e.Course_no = c.Course_no and Sno = X ;
```

#6 检查查询属性是否存在。

```
Please enter SQL request:
select S.Serror, S.Name from Student_Course where Sno = X
Illegal attributes input.
```

#7 输入“#”退出程序。

```
Please enter SQL request:
#
-----
Process exited after 491.9 seconds with return value 0
请按任意键继续. . .
```