数据库实验11_20337025_崔璨明

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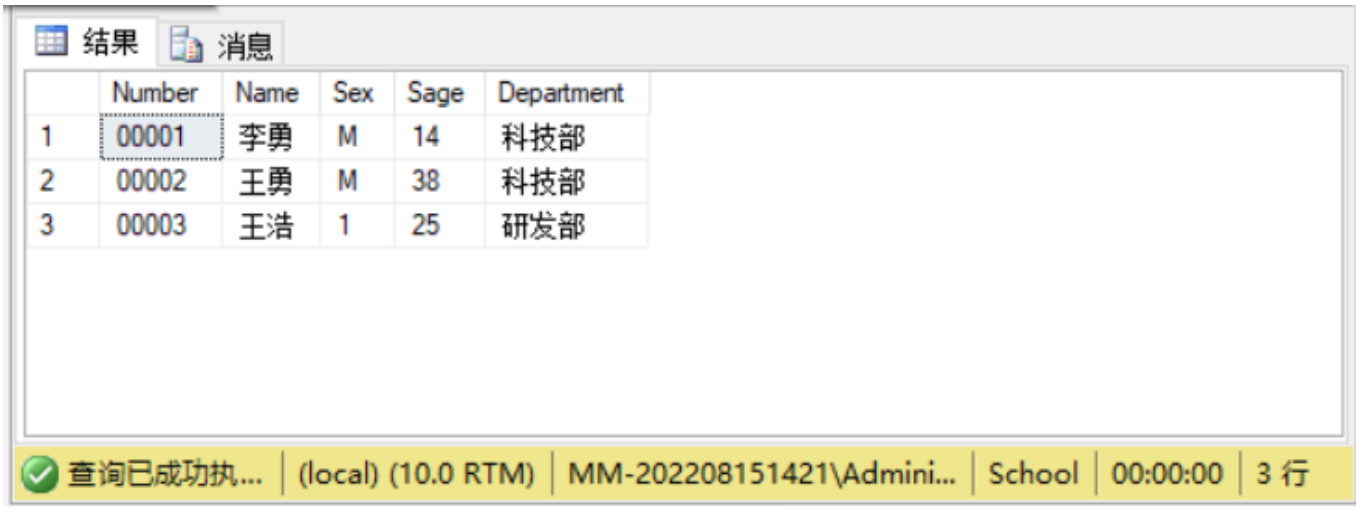
按照示例中worker建表：

```
create table Worker(
Number char(5),
Name char(8) ,
Sex char(1),
Sage int ,
Department char(20),
constraint PK_Worker Primary Key (Number)
)

insert into Worker(Number,Name,Sex,Sage,Department)
values ('00001','李勇','M',14,'科技部')
insert into Worker(Number,Name,Sex,Sage,Department)
values ('00002','王勇','M',38,'科技部')
insert into Worker(Number,Name,Sex,Sage,Department)
values ('00003','王浩','1',25,'研发部')

select * from Worker
```

结果如下：



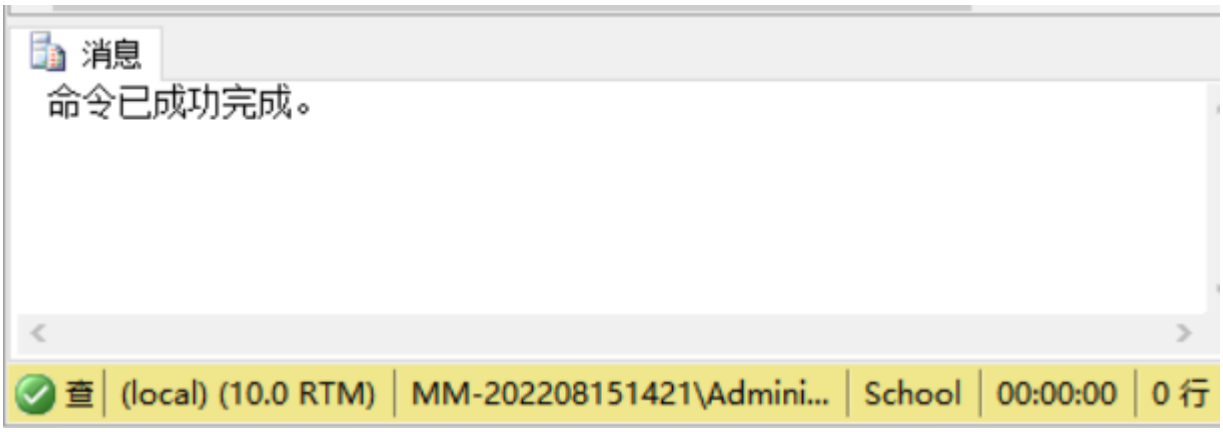
	Number	Name	Sex	Sage	Department
1	00001	李勇	M	14	科技部
2	00002	王勇	M	38	科技部
3	00003	王浩	1	25	研发部

1.

建立一个在worker表上的触发器T4，要求插入记录的sage值必须比表中已记录的最大sage值大。

```
go
create trigger T4 on worker
for insert
as
if (select sage from inserted)<(select max(sage)from worker)
begin
print'T4:插入记录的sage值必须比表中已记录的最大sage值大'
Rollback transaction
End
```

执行结果：

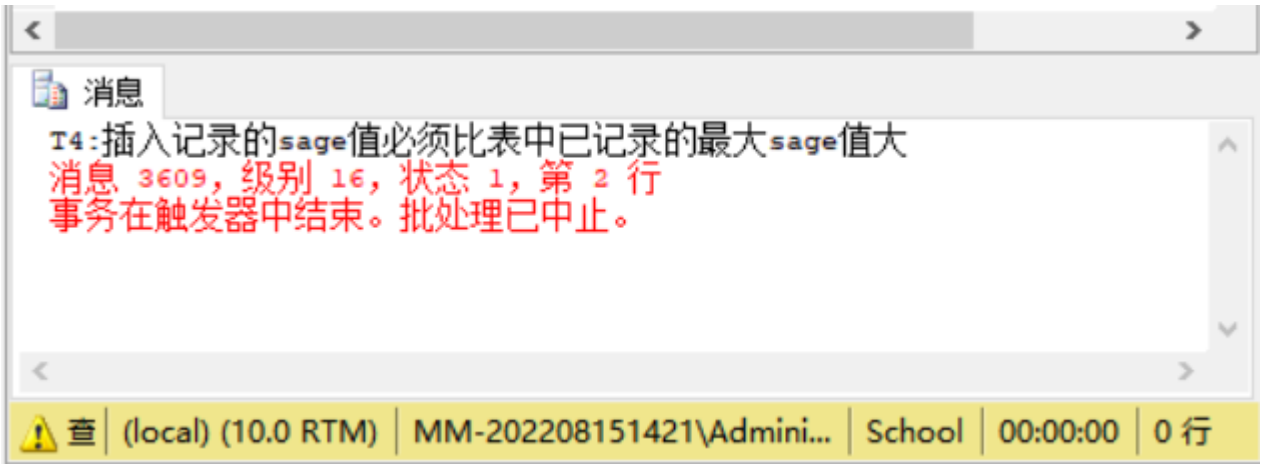


2.

演示违反触发器T4的操作，即插入一条比表中已记录的最大sage值小的记录。

```
insert into Worker(Number,Name,Sex,Sage,Department)
values ('00004','沙壁','1',6,'研发部')
```

执行结果如下，可见该操作违反了触发器T4：

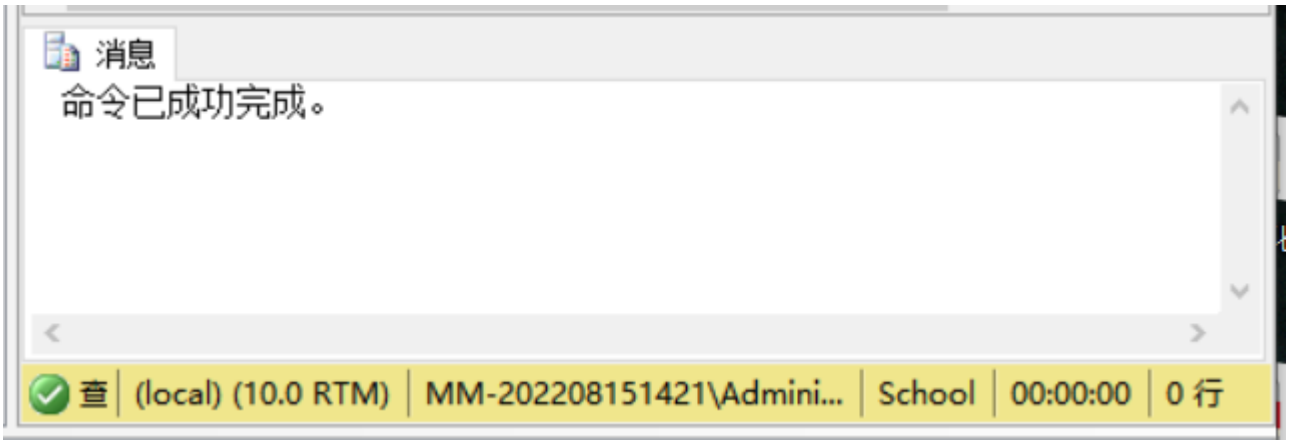


3.

建立一个在worker表上的触发器T5，要求当更新一个记录的时候，表中记录的sage值要比老记录的sage值大，因为一般工资级别只能升不能降。

```
go
create trigger T5 on worker
for update
as
if update(sage)
begin
if (select sage from deleted) > (select sage from inserted)
        begin
        print'T5:工资级别只能升不能降'
        Rollback transaction
        End
End
```

执行结果：

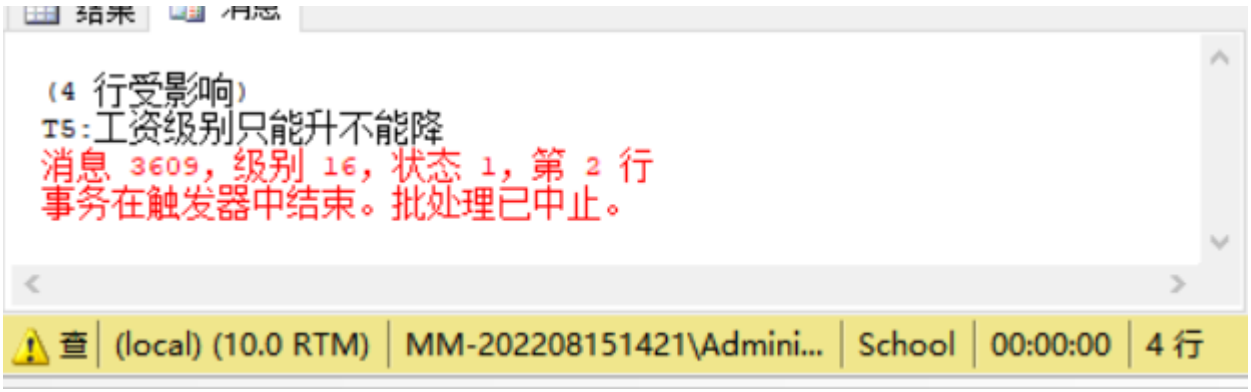


4.

演示违反触发器T5的操作。

```
--表中记录的员工"沙壁"的sage是66
select * from worker
update worker
set Sage=65
where Name='沙壁'
```

执行结果如下，可见违反了触发器T5：

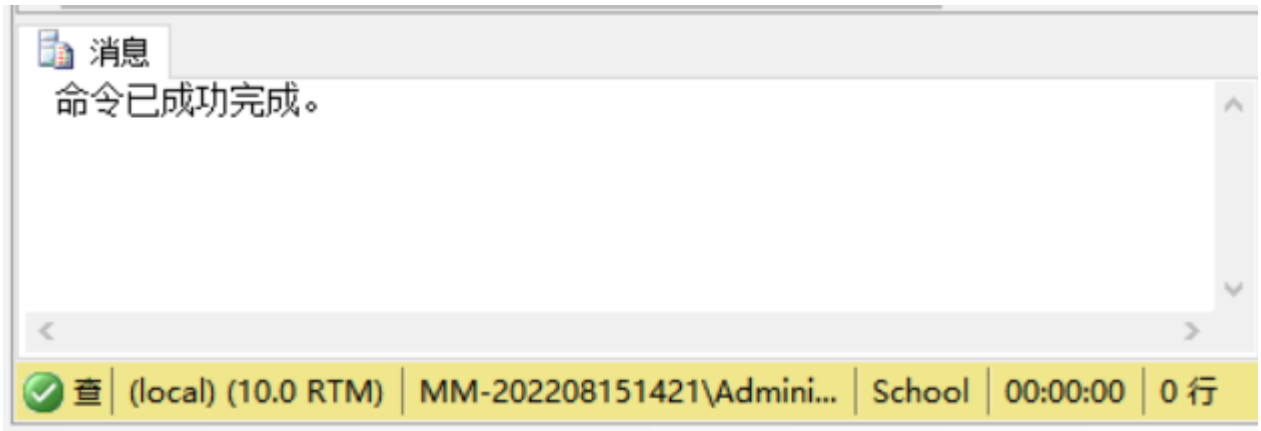


5.

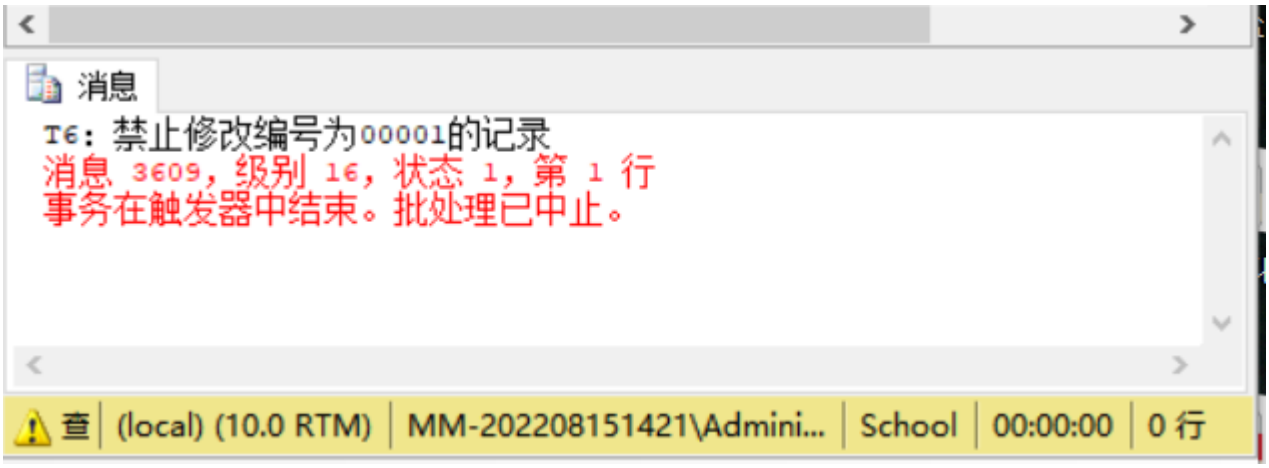
为worker表建立触发器T6，禁止修改编号为00001的记录。

```
go
create trigger T6 on worker
for update
as
begin
if (select number from deleted)='00001'
        Begin
        print'T6: 禁止修改编号为00001的记录'
        Rollback transaction
        End
End
```

执行结果如下：



当修改时会违反触发器T6：



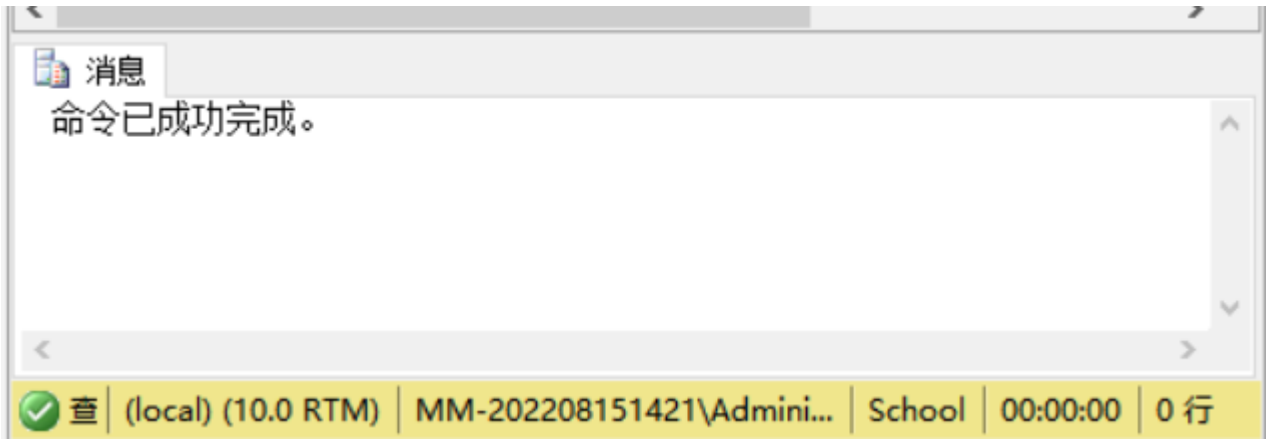
6.

建立基于students和stu_card两个表的视图，创建INSTEADOF触发器使该视图支持更新操作，并演示更新操作。 （注：stu_card的建表见PPT10参照完整性page10）

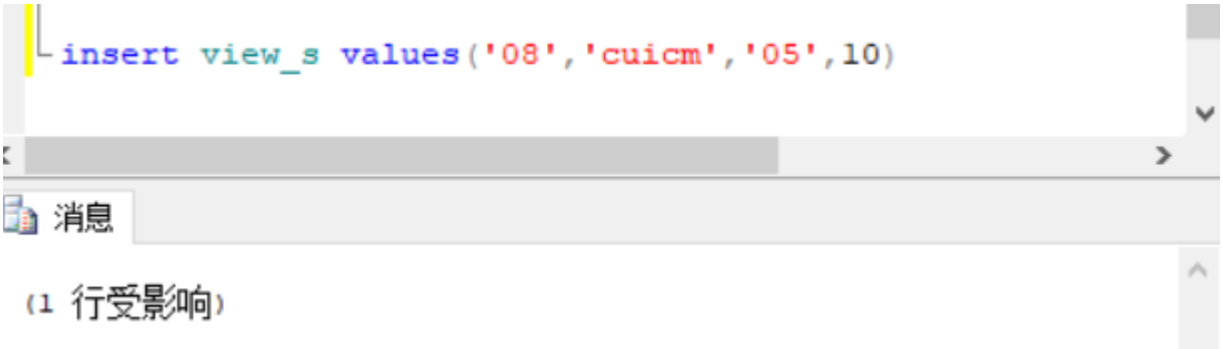
```
go
create view view_s as
select STUDENTS.sid,STUDENTS.sname,stu_card.card_id,stu_card.remained_money
from STUDENTS,stu_card
where STUDENTS.sid=stu_card .stu_id
go

create trigger triger on view_s
INSTEAD OF INSERT
AS
BEGIN
SET NOCOUNT ON
IF (NOT EXISTS
        (SELECT s.sid
```

```
        from STUDENTS s,inserted i
        where s.sid=i.sid
        )
)
        BEGIN
        INSERT INTO STUDENTS
                select sid,sname,null,null from inserted
        INSERT INTO Stu_Card
                select card_id,sid,remained_money from inserted
        END
ELSE PRINT'exited'
END
```

执行结果：



演示更新操作：

```
insert view_s values('08','cuicm','05',10)
```

执行结果如下：