# 第十二次实验

**(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**

```
1  use school
2  go
3  create trigger t4 on worker
4  for insert
5  as
6  if (select sage from inserted) < (select max(sage) from worker)
7  begin
8  print('The inserted sage must be more than the maxium one in
   worker!')
9  rollback transaction
10 end
```

```
use school
go
create trigger t4 on worker
for insert
as
if (select sage from inserted) < (select max(sage) from worker)
begin
print('The inserted sage must be more than the maxium one in worker!')
rollback transaction
end
```

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消息

命令已成功完成。

完成时间: 2021-11-29T14:41:23.6823916+08:00

**(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。**

```
1  insert into worker values('00006','孙亚','M',100,'游戏部')
```

The inserted sage must be more than the maxium one in worker!
消息 3609，级别 16，状态 1，第 1 行
事务在触发器中结束。批处理已中止。

完成时间: 2021-11-29T14:43:57.2115398+08:00

**(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。**

```
1   use school
2   go
3   create trigger t5 on worker
4   for update
5   as
6   if (select sage from inserted) < (select sage from deleted)
7   begin
8   print('The new sage must be more than the original one!')
9   rollback transaction
10  end
```

```
use school
go
create trigger t5 on worker
for update
as
if (select sage from inserted) < (select sage from deleted)
begin
print('The new sage must be more than the original one!')
rollback transaction
end
```

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消息
命令已成功完成。

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**(4)演示违反触发器T5的操作。**

```
1  update worker set sage=100 where number='00005'
```

```
The new sage must be more than the original one!
消息 3609，级别 16，状态 1，第 1 行
事务在触发器中结束。批处理已中止。

完成时间：2021-11-29T14:49:05.5140277+08:00
```

**(5)为worker表建立触发器T6，禁止修改编号为00001的记录。**

```
 1  use school
 2  go
 3  create trigger t6 on worker
 4  for update
 5  as
 6  if '00001' in (select number from deleted)
 7  begin
 8  print('Record 00001 cannot be changed!')
 9  rollback transaction
10  end
```

```
   use school
   go
 create trigger t6 on worker
   for update
   as
 if '00001' in (select number from deleted)
   begin
 print('Record 00001 cannot be changed!')
   rollback transaction
   end
```

```
100 %
```

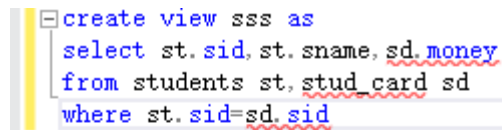消息

命令已成功完成。

完成时间：2021-11-29T14:58:00.6326325+08:00

```
1  update worker set sage=100 where number='00001'
```

**(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）**

```
create view sss as
select st.sid,st.sname,sd.money
from students st,stud_card sd
where st.sid=sd.sid
```

```
create view sss as
   select st.sid,st.sname,sd.money
   from students st,stud_card sd
   where st.sid=sd.sid
```

```
消息
命令已成功完成。
```

完成时间: 2021-11-29T15:12:17.8637487+08:00

```
create trigger instead on sss
instead of insert
as
begin
    set nocount on
    if (NOT EXISTS
        (select s.sid from sss s,inserted i
         where s.sid=i.sid))
    begin
        insert into students
            select sid,sname,null,null from inserted
        insert into stud_card
```

```
13              select sid,sname,money from inserted
14      end
15 end
```

```sql
create trigger instead on sss
 instead of insert
 as
begin
     set nocount on
     if (NOT EXISTS
         (select s.sid from sss s,inserted i
          where s.sid=i.sid))
     begin
         insert into students
             select sid,sname,null,null from inserted
         insert into stud_card
             select sid,sname,money from inserted
     end
end
```

100 %

消息

命令已成功完成。

完成时间: 2021-11-29T15:23:23.2794636+08:00

```sql
1 insert into sss values('1','hhh',30)
2 select * from sss
```

结果   消息

|   | sid       | sname    | money |
|---|-----------|----------|-------|
| 1 | 1         | hhh      | 30    |
| 2 | 800001216 | gfxrgs   | 10    |
| 3 | 800002933 | vnbqzsvv | 20    |