

Assignment 5

DBMS LAB

IT552

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Fifth Semester

Information Technology (HY)

Q1. Write a trigger on salesman(sno, name, city, balance) table. The system must keep track of the records that are being deleted or modified. When a record is deleted or modified, the original record details are stored in information(sno, balance, operation) table.

```
create table salesman (  
sno varchar2(4) ,  
name varchar2(10) ,  
city varchar2(10) ,  
balance number(8,2)  
);  
  
insert into salesman values ( 'S01' , 'STEVE' , 'Mumbai' ,  
5025 ) ;  
  
insert into salesman values ( 'S02' , 'BRUCE' , 'Delhi' ,  
1250 ) ;  
  
insert into salesman values ( 'S03' , 'PETER' , 'Mumbai' ,  
6000 ) ;  
  
insert into salesman values ( 'S04' , 'CLARK' ,  
'Bengaluru' , 2300 ) ;  
  
insert into salesman values ( 'S05' , 'DIANA' , 'Kolkata'  
, 4500 ) ;  
  
insert into salesman values ( 'S06' , 'NATASHA' , 'Mumbai'  
, 3689 ) ;
```

SNO	NAME	CITY	BALANCE
S01	STEVE	Mumbai	5025
S02	BRUCE	Delhi	1250
S03	PETER	Mumbai	6000
S04	CLARK	Bengaluru	2300
S05	DIANA	Kolkata	4500
S06	NATASHA	Mumbai	3689

```
create table information (  
sno varchar2(4) ,  
balance number(8,2),  
operation varchar2(10)  
);
```

no data found

```
create trigger edit_trigger  
after update or delete on salesman  
for each row  
declare oper varchar2(10);  
begin  
if updating then  
oper:='Update';  
end if;  
if deleting then  
oper:='Delete';  
end if;  
insert into information values (:old.sno, :old.balance,  
oper);  
end;
```

-- Trigger Created

```
update salesman set balance = balance*0.5 where city = 'Kolkata';
```

SNO	BALANCE	OPERATION
S05	4500	Update

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SNO	NAME	CITY	BALANCE
S05	DIANA	Kolkata	2250

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Information

salesman

```
delete from salesman where city = 'Mumbai';
```

SNO	BALANCE	OPERATION
S05	4500	Update
S01	5025	Delete
S03	6000	Delete
S06	3689	Delete

information

SNO	NAME	CITY	BALANCE
S02	BRUCE	Delhi	1250
S04	CLARK	Bengaluru	2300
S05	DIANA	Kolkata	2250

salesman

Q2. Write a trigger on customer (cno, name, city balance) table. The system should keep track of the following to perform the operation on balance, if the balance is negative make it zero. But the negative balance is stored as loan amount and the loan no as cno in loan(loanno, amount) table.

```
create table customer (  
cno varchar2(4) ,  
name varchar2(10) ,  
city varchar2(10) ,  
balance number(8,2)  
);  
  
insert into customer values ( 'C01' , 'CLINT' , 'Delhi' ,  
325 ) ;  
  
insert into customer values ( 'C02' , 'KATY' , 'Delhi' ,  
1150 ) ;  
  
insert into customer values ( 'C03' , 'NATASHA' ,  
'Chennai' , 1250 ) ;  
  
insert into customer values ( 'C04' , 'WANDA' , 'Kolkata'  
, 530 ) ;  
  
insert into customer values ( 'C05' , 'SCOTT' , 'Chennai'  
, 985 ) ;  
  
insert into customer values ( 'C06' , 'HOPE' , 'Mumbai' ,  
1000 ) ;
```

CNO	NAME	CITY	BALANCE
C01	CLINT	Delhi	325
C02	KATY	Delhi	1150
C03	NATASHA	Chennai	1250
C04	WANDA	Kolkata	530
C05	SCOTT	Chennai	985
C06	HOPE	Mumbai	1000

```
create table loan (loanno varchar2(4),amount number(8,2));
```

--Table Created

```
create trigger balance_negative
```

```
before update on customer
```

```
for each row when ( new.balance < 0 )
```

```
declare
```

```
bal number(8,2) ;
```

```
begin
```

```
if :new.balance < 0 then
```

```
bal := 0 - :new.balance ;
```

```
:new.balance := 0 ;
```

```
insert into loan values ( :old.cno, bal ) ;
```

```
end if ;
```

```
end ;
```

--Trigger created

```
update customer set balance = balance - 1000 where balance  
< 1500;
```

CNO	NAME	CITY	BALANCE
C01	CLINT	Delhi	0
C02	KATY	Delhi	150
C03	NATASHA	Chennai	250
C04	WANDA	Kolkata	0
C05	SCOTT	Chennai	0
C06	HOPE	Mumbai	0

customer

LOANNO	AMOUNT
C01	675
C04	470
C05	15

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loan