







create table audit\_budget

(

project\_no char(4) null,

user\_name char(20) null,

date datetime null,

budget\_old float null,

budgetnew float null

);

go

create trigger modify\_budget

on project

after update

as

if update(budget) begin

declare @old\_budget float;

declare @new\_budget float;

declare @project\_no char(4);

select @old\_budget = (select budget from deleted);

select @new\_budget = (select budget from inserted);

select @project\_no = (select project\_no from inserted);

insert into audit\_budget values (@project\_no, USER\_NAME(), GETDATE(), @old\_budget, @new\_budget);

end

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go

create trigger total\_budget on project after update as

if update(budget)

begin

declare @sum\_old1 float;

declare @sum\_old2 float;

declare @sum\_new float;

select @sum\_new = (select sum(budget) from inserted);

select @sum\_old1 = (select sum(budget) from project p where p.project\_no not in (select project\_no from deleted));

select @sum\_old2 = (select sum(budget) from deleted);

print @sum\_new;

print @sum\_old1;

print @sum\_old2;

if(@sum\_new > (@sum\_old1 + @sum\_old2) \* 1.5)

begin

print 'no modificatonof budget';

rollback transaction;

end

else

print 'The modification of budget is executed';

end

update project set budget = 1000000 where project\_no = 'p3';

select \* from audit\_budget

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--insert into employee(emp\_no, emp\_fname, emp\_lname, dept\_no) values (12, 'test', 'test', 'd2');

update works\_on set emp\_no = 12 where emp\_no = 10102;

go

create trigger works\_integrity

on works\_on after update

as

if update(emp\_no)

begin

if(select count(\*) from employee inner join inserted on employee.emp\_no = inserted.emp\_no) = 0

begin

print 'rollback transaction. no rows modified. ';

rollback transaction;

end

else

print 'transaction is successfull. rows modified.;'

end

select \* from works\_on

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update employee set emp\_no = 4 where emp\_no = 18316;

go

create trigger refinit\_workson2

on employee

after update

as

if update(emp\_no)

begin

if(select count(\*) from works\_on inner join deleted on works\_on.emp\_no = deleted.emp\_no) > 0

begin

print 'no modification or update on rows. rollback transaction';

rollback transaction;

end

else

print 'rows modified successfully.';

end