go

use Biblioteca

go

create table LogTable(

Lid int identity primary key,

TypeOperation Varchar(50),

TableOperation Varchar(50),

Execution Datetime)

go

select \* from Genuri

--validare autor

go

create or alter function validare\_autor(@Nume varchar(1000))

returns varchar(1500) as

begin

declare @msg\_eroare varchar(1500);

set @msg\_eroare = ' ';

if (@Nume like '%[0-9!@#$%^&\*()\_-+=]%')

begin

set @msg\_eroare = @msg\_eroare + 'Numele ar trebui sa contina doar litere'

end

if len(@Nume) > 50 or len(@Nume) < 1 set @msg\_eroare = @msg\_eroare + 'Dimensiunea numelui trebuie sa fie intre 1 si 50 de caractere!'

set @msg\_eroare = replace(@msg\_eroare, ',', char(10));

return @msg\_eroare;

end

go

--validare carti

go

create or alter function validare\_carti(@Titlu varchar(1000))

returns varchar(1500) as

begin

declare @msg\_eroare varchar(1500);

set @msg\_eroare = ' ';

if (@Titlu like '%[!@#$%^&\*()\_-+=]%')

begin

set @msg\_eroare = @msg\_eroare + 'Titlul ar trebui sa contina doar litere sau cifre'

end

if len(@Titlu) > 50 or len(@Titlu) < 1 set @msg\_eroare = @msg\_eroare + 'Dimensiunea titlului trebuie sa fie intre 1 si 50 de caractere!'

set @msg\_eroare = replace(@msg\_eroare, ',', char(10));

return @msg\_eroare;

end

go

--returnam urmatorul id in din tabela 'Autori'

go

create or alter function get\_next\_id\_Autori()

returns int

as

begin

declare @id int

set @id = 0

select top 1 @id = Auid from Autori order by Auid desc

set @id = @id + 1;

return @id

end

go

--returnam un id de gen pt cheie straina in carti

go

create or alter function get\_gid()

returns int

as

begin

declare @gid int

set @gid = 0

select top 1 @gid = Gid from Genuri order by Gid desc

return @gid

end

go

--returnam urmatorul id in din tabela 'Carti'

go

create or alter function get\_next\_id\_Carti()

returns int

as

begin

declare @id int

set @id = 0

select top 1 @id = Cid from Carti order by Cid desc

set @id = @id + 1;

return @id

end

go

--procedura stocata ce insereaza datele, daca esueaza, roll-back total

go

create or alter procedure insert\_total\_rollback @nume\_autor varchar(30), @an\_nastere\_autor int, @titlu\_carte varchar(30), @nr\_carti\_carte int, @data\_imprumut\_carte datetime, @gid\_carte int

as

begin

begin tran

begin try

declare @msg\_eroare\_autor varchar(1500)

declare @msg\_eroare\_carte varchar(1500)

set @msg\_eroare\_autor = dbo.validare\_autor(@nume\_autor)

set @msg\_eroare\_carte = dbo.validare\_carti(@titlu\_carte)

if (len(@msg\_eroare\_autor) > 0 or len(@msg\_eroare\_carte) > 0)

begin

declare @msg\_eroare varchar(5000)

set @msg\_eroare = @msg\_eroare\_autor + @msg\_eroare\_carte

print(@msg\_eroare)

raiserror(@msg\_eroare, 14,1)

end

declare @id\_autor int

set @id\_autor = dbo.get\_next\_id\_Autori();

insert into LogTable(TypeOperation, TableOperation, Execution) values ('select Auid from', 'Autori', GETDATE())

insert into Autori(Nume,An\_Nastere) values ( @nume\_autor,@an\_nastere\_autor)

insert into LogTable(TypeOperation, TableOperation, Execution) values ('insert into', 'Autori', GETDATE())

declare @id\_carte int

set @id\_carte = dbo.get\_next\_id\_Carti();

insert into LogTable(TypeOperation, TableOperation, Execution) values ('select Cid from', 'Carti', GETDATE())

insert into Carti(Titlu, Nr\_Carti, Data\_Imprumut, Gid) values (@titlu\_carte, @nr\_carti\_carte, @data\_imprumut\_carte, @gid\_carte)

insert into LogTable(TypeOperation, TableOperation, Execution) values ('insert into', 'Carti', GETDATE())

insert into CartiAutori(Cid, Auid) values(@id\_carte, @id\_autor)

insert into LogTable(TypeOperation, TableOperation, Execution) values ('insert into', 'CartiAutori', GETDATE())

commit tran

select 'Transaction committed'

end try

begin catch

rollback tran

select ERROR\_MESSAGE()

select 'Transaction rollbacked'

end catch

end

go

delete from LogTable

select \* from Autori

select \* from Carti

select \* from CartiAutori

select @@TRANCOUNT as TranCount

--commit cu succes

exec insert\_total\_rollback 'Adolfo Bioy Casares ', '1914', 'După-amiaza unui faun', '8', '2020-11-05', '60'

--commit gresit

exec insert\_total\_rollback '123', '1889', 'Ben?!','6' ,'2019-09-01', '60'

select \* from Autori

select \* from Carti

select \* from CartiAutori

select @@TRANCOUNT as TranCount

select \* from LogTable

insert into Carti(Titlu, Nr\_Carti, Data\_Imprumut, Gid) values ('Cili', '7', '1998-09-11', '60')

insert into Autori(Nume, An\_Nastere) values ('Leroy Forest', '1867')

--procedura stocata care insereaza date, daca esueaza sa se pastreze cat mai mult posibil

go

create or alter procedure insert\_partial\_rollback @nume\_autor varchar(30), @an\_nastere\_autor int, @titlu\_carte varchar(30), @nr\_carti\_carte int, @data\_imprumut\_carte datetime, @gid\_carte int

as

begin

declare @id\_autor int

set @id\_autor = -1

declare @id\_carte int

set @id\_carte = -1

begin tran

begin try

declare @msg\_eroare\_autor varchar(1500)

set @msg\_eroare\_autor = dbo.validare\_autor(@nume\_autor)

if (len(@msg\_eroare\_autor ) > 0)

begin

raiserror(@msg\_eroare\_autor,14,1)

end

set @id\_autor = dbo.get\_next\_id\_Autori();

insert into LogTable(TypeOperation, TableOperation, Execution) values('select Auid from', 'Autori', GETDATE())

insert into Autori(Nume,An\_Nastere) values ( @nume\_autor,@an\_nastere\_autor)

insert into LogTable(TypeOperation, TableOperation, Execution) values('insert into', 'Autori', GETDATE())

commit tran

select 'Transaction committed for Autori'

end try

begin catch

rollback tran

select 'Transaction rollbacked for Autori'

end catch

begin tran

begin try

declare @msg\_eroare\_carte varchar(1500)

set @msg\_eroare\_carte = dbo.validare\_carti(@titlu\_carte)

if (len(@msg\_eroare\_carte ) > 0)

begin

raiserror(@msg\_eroare\_carte,14,1)

end

set @id\_carte = dbo.get\_next\_id\_Carti();

insert into LogTable(TypeOperation, TableOperation, Execution) values('select Cid from', 'Carti', GETDATE())

insert into Carti(Titlu, Nr\_Carti, Data\_Imprumut, Gid) values (@titlu\_carte, @nr\_carti\_carte, @data\_imprumut\_carte, @gid\_carte)

insert into LogTable(TypeOperation, TableOperation, Execution) values('insert into', 'Carti', GETDATE())

commit tran

select 'Transaction committed for Carti'

end try

begin catch

rollback tran

select 'Transaction rollbacked for Carti'

end catch

begin tran

begin try

if (@id\_autor = -1 or @id\_carte = -1)

begin

raiserror('Nu se poate face inserarea in tabela CartiAutori',14,1)

end

insert into CartiAutori(Cid, Auid) values(@id\_carte, @id\_autor)

insert into LogTable(TypeOperation, TableOperation, Execution) values ('insert into', 'CartiAutori', GETDATE())

commit tran

select 'Transaction committed for CartiAutori'

end try

begin catch

rollback tran

select 'Transaction rollback for CartiAutori'

end catch

end

go

delete from LogTable

select \* from Autori

select \* from Carti

select \* from CartiAutori

select @@TRANCOUNT as TranCount

--commit cu succes toate tabelele

exec insert\_partial\_rollback 'Silvia Moreno-Garcia', '1981', 'Mexican Gothic', '4', '1978-11-01', '60'

--commit cu succes doar in tabela Autori

exec insert\_partial\_rollback 'Alejo Carpentier', '1978', 'Micul Print!?', '4', '2017-08-01', '60'

--commit cu succes doar in tabela Carti

exec insert\_partial\_rollback '123', '1900', 'Pașii pierduţi', '4', '2016-11-10', '60'

--commit gresit

exec insert\_partial\_rollback '123', '1900', 'Micul Print!!??', '4', '2007-01-12', '60'

select \* from Autori

select \* from Carti

select \* from CartiAutori

select @@TRANCOUNT as TranCount

select \* from LogTable