```sql
/*
PCXX - STT - MSSV - Ho Phuc Lam
De 01 - năm 2024 - Thi CK HeQTCSDL
*/use Northwind
Go
--Cau 1
--Tao 2 login
--login sv1
create login sv1 with password = 'a@1',
default_database =  Northwind
Go
--login sv2
create login sv2 with password = 'a@1',
default_database =  Northwind
Go

--tao database user ung voi login
use Northwind
Go
--user sv1
create user sv1 for login sv1
Go
--user sv2
create user sv2 for login sv2
Go

--ket noi voi 2 user va thuc hien lenh select
select * from Employees
Go
--ket qua cua select la bao loi
-- do 2 user nay vua moi tao chua phan quyen hay cap quyen
-- van con dang public nen khong xem duoc bang trong CSDL Northwind
```

```sql
--gan quyen select cho user sv2
grant select on Employees to sv2
Go
--kiem tra ket qua tu user sv2
select * from Employees
Go
--xoa quyen select cho user sv2
revoke select on Employees to sv2
Go
--sau do ngat ket noi


--dung cau lenh insert into values de chen mau tin moi vao bang Employees
insert into Employees(FirstName, LastName) values ('Ho', 'Phuc Lam')
Go
--ket qua: khong chen duoc o user sv1 va sv2 do khong co role viet v
--ket luan: de chen duoc du lieu tu user sv1 va sv2, ta can add role cho 2 user nay
--ta cần thực hiện thêm quyền role db_databasewriter cho hai user sv1 và user sv2
-- cho phép user thêm, sửa, xóa, update cho các dữ liệu
alter role db_datawriter add member sv1
alter role db_datawriter add member sv2
Go


--thuc thi chen thu o 2 user nay
use Northwind
insert into Employees(FirstName, LastName) values ('user', 'sv1')
Go
use Northwind
insert into Employees(FirstName, LastName) values ('user', 'sv2')
Go
```

```sql
--câu 2: viết trigger
create trigger tr_2_OrderDetails
on [dbo].[Order Details]
after insert, update, delete
as
    begin
        update od
        set od.Discount = case
                                when od.Quantity <= 10 then 0.03
                                when od.Quantity between 11 and 15 then 0.05
                                when od.Quantity > 15 then 0.10
                                else 0
                            end
        from [Order Details] od, inserted i
        where i.OrderID = od.OrderID
    end
Go


--kiểm tra trigger

-- xem lai cac bang
select * from [Order Details] where OrderID = '10248'
Go
--chèn thử
insert into [Order Details](OrderID, ProductID, UnitPrice, Quantity)
values ('10248', '10', '20.5','35')
Go
--xem ket qua
-- xem lai cac bang
select * from [Order Details] where OrderID = '10248' and ProductID = '10'
Go
```

```sql
--câu 3:
--Thực hiện back up
--full back up
backup database Northwind
    to disk = 'T:\ThiHeQTCSDL\Northwind_FULL.bak'
    with description = 'Sao luu full backup Northwind'
Go
--difference backup
backup database Northwind
    to disk = 'T:\ThiHeQTCSDL\Northwind_DIFF.bak'
    with differential,
    description = 'Sao luu Defference backup Northwind'
Go

--Tạo 1 transaction giảm giá 10 % là 1-0.1=0.9
begin tran
    update od
    set  od.UnitPrice = od.UnitPrice*0.9
    from [Order Details] od
    where od.Quantity > 15
commit
Go
--Xem lại bảng
select * from [Order Details] where Quantity > 15
Go

--Xóa CSDL Nothwind
use master
Go
drop database Northwind
Go
```

```sql
--Thực hiện restore lại CSDL.
--full
restore database Northwind
    from disk = 'T:\ThiHeQTCSDL\Northwind_FULL.bak'
    with norecovery
Go
--difference
restore database Northwind
    from disk = 'T:\ThiHeQTCSDL\Northwind_DIFF.bak'
    with norecovery
GO
--ket thuc qua trinh
restore database Northwind
with recovery
Go


--kiem tra lai
use Northwind
Go
select * from [Order Details] where Quantity > 15
Go
```