Bài tập lớn:

---- Phân loại sản phẩm: từ csdl northwind ta cần tìm ra các sản phẩm thường được mua cùng nhau từ các khách hàng

--Ta sẽ lọc các yếu tố như Country từ đó ta có thể biết khách hàng đến từ quốc gia nào sẽ cần các sản phẩm ra sao

--và có thể đưa ra chiến lược phát triển

----gộp nhóm 'Argentina','Austria','Brazil','Canada','Mexico','Venezuela','USA' nhóm nam mỹ và châu úc

--gộp nhóm 'Belgium','Denmark','Finland','France','Germany','Ireland','Italy','Norway','Poland','Portugal','Spain','Sweden','Switzerland','UK' thuộc nhóm châu âu

use Northwind

go

select distinct c.ContactTitle from dbo.Customers as C

select \* from dbo.Customers as C

where C.Country='Germany' and c.ContactTitle like'Sales%'

select \* from dbo.[Customer and Suppliers by City]

where Relationship='Customers'

select C.CustomerID,ProductID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country='Germany' and C.CustomerID='ALFKI'

order by C.CustomerID ASC, OD.ProductID ASC

select C.CustomerID, (select ProductID )

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

---- lấy được danh sách sản phẩm của người ở Germany mua

declare @ProductID int

declare @CustomerID nchar(5)

declare cus cursor

for

select distinct C.CustomerID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country='Germany'

order by C.CustomerID ASC

open cus

FETCH NEXT FROM cus into @CustomerID

WHILE @@FETCH\_STATUS = 0

BEGIN

select OD.ProductID,C.CustomerID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country='Germany' and C.CustomerID=@CustomerID

order by OD.ProductID ASC

FETCH NEXT FROM cus into @CustomerID

END

close cus

DEALLOCATE cus

Bước 1: lấy ra danh sách mã sản phẩm

select productID as danhsachsanpham

from dbo.Products

order by ProductID ASC

bước 2: Tạo ra một bảng luật kết hợp cho từng khoa nhờ câu lệnh truy vấn động, có cấu trúc gồm tên người mua và tên mã sản phẩm được mua

declare @query VARCHAR(MAX)

set @query='create table Germany\_cus2(

CustomerID nchar(5),';

declare @ProductID int

DECLARE CURSOR\_PRODUCT CURSOR

for

select ProductID

from dbo.Products

order by ProductID ASC

OPEN CURSOR\_PRODUCT;

FETCH NEXT FROM CURSOR\_PRODUCT INTO @ProductID

WHILE @@FETCH\_STATUS = 0

BEGIN

set @query=@query+'['+cast(@ProductID as nchar(3))+']'+' bit default 0,' ;

FETCH NEXT FROM CURSOR\_PRODUCT INTO @ProductID

end

CLOSE CURSOR\_PRODUCT;

DEALLOCATE CURSOR\_PRODUCT;

SET @query = SUBSTRING(@query,1,LEN(@query)-1)

SET @query = @query + ')'

exec(@query)

* Thêm mới dữ liệu cho người dùng tên là ALFKI

declare @productID int

declare @QUERY VARCHAR(MAX)

declare @temp int= 0

declare @item bit=0

set @QUERY='INSERT INTO [dbo].[Germany\_cus2] values(''ALFKI'

while @temp< (select count(P.ProductID)

From dbo.Products as P)

begin

set @temp=@temp+1

declare cursor\_Cus cursor

for

select distinct OD.ProductID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country='Germany' and C.CustomerID='ALFKI'

order by OD.ProductID ASC

open cursor\_Cus

fetch next from cursor\_Cus into @productID

WHILE @@FETCH\_STATUS = 0

BEGIN

if @temp=@productID begin

set @temp=@temp+1

set @item=1

--set @QUERY =@QUERY+''','''+cast(@item as varchar)

fetch next from cursor\_Cus into @productID

end

else

begin

set @temp=@temp+1

set @item=0

--fetch next from cursor\_Cus into @productID

end

set @QUERY =@QUERY+''','''+cast(@item as varchar)

set @item=0

end

close cursor\_Cus

DEALLOCATE cursor\_Cus

end

set @QUERY=@QUERY+''','''

SET @QUERY = SUBSTRING(@QUERY,1,LEN(@QUERY)-2)

set @QUERY=@QUERY+')'

select @QUERY

exec(@QUERY)

THêm mới nhiều dữ bảng ghi dữ liệu của các khách hàng đến từ đức

declare @cusID nchar(5)

declare cus\_ID cursor for

select distinct O.CustomerID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country='Germany'

open cus\_ID

fetch next from cus\_ID into @cusID

WHILE @@FETCH\_STATUS = 0

BEGIN

print @cusID

declare @productID int

declare @QUERY VARCHAR(MAX)

declare @temp int= 0

declare @item bit=0

set @QUERY='INSERT INTO [dbo].[Germany\_cus2] values('''+@cusID

while @temp< (select count(P.ProductID)

From dbo.Products as P)

begin

set @temp=@temp+1

declare cursor\_Cus cursor

for

select distinct OD.ProductID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country='Germany' and C.CustomerID=@cusID

order by OD.ProductID ASC

open cursor\_Cus

fetch next from cursor\_Cus into @productID

WHILE @@FETCH\_STATUS = 0

BEGIN

if @temp=@productID begin

set @temp=@temp+1

set @item=1

--set @QUERY =@QUERY+''','''+cast(@item as varchar)

fetch next from cursor\_Cus into @productID

end

else

begin

set @temp=@temp+1

set @item=0

--fetch next from cursor\_Cus into @productID

end

set @QUERY =@QUERY+''','''+cast(@item as varchar)

set @item=0

end

close cursor\_Cus

DEALLOCATE cursor\_Cus

end

set @QUERY=@QUERY+''','''

SET @QUERY = SUBSTRING(@QUERY,1,LEN(@QUERY)-2)

set @QUERY=@QUERY+')'

exec(@QUERY)

fetch next from cus\_ID into @cusID

end

close cus\_ID

DEALLOCATE cus\_ID

Lấy danh sách khách hàng thuộc nhóm 1

select distinct C.CustomerID

from dbo.Customers as C

where C.Country not in('Argentina','Austria','Brazil','Canada','Mexico','Venezuela','USA')

-------- cần sửa

declare @cusID nchar(5)

declare cus\_ID cursor for

select distinct O.CustomerID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country not in('Argentina','Austria','Brazil','Canada','Mexico','Venezuela','USA')

order by O.CustomerID ASC

open cus\_ID

fetch next from cus\_ID into @cusID

WHILE @@FETCH\_STATUS = 0

BEGIN

print @cusID

declare @productID int =1

declare @QUERY VARCHAR(MAX)

declare @temp int= 0

declare @item bit=0

set @QUERY='INSERT INTO [dbo].[EU\_FPGrowth] values('''+@cusID

while @temp< (select count(P.ProductID)+1

From dbo.Products as P)

begin

--set @temp=@temp+1

declare cursor\_Cus cursor

for

select distinct OD.ProductID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.CustomerID=@cusID

order by OD.ProductID ASC

open cursor\_Cus

fetch next from cursor\_Cus into @productID

WHILE @@FETCH\_STATUS = 0

BEGIN

set @temp=@temp+1

if @temp=@productID begin

set @item=1

fetch next from cursor\_Cus into @productID

end

else

begin

--set @temp=@temp+1

set @item=0

--fetch next from cursor\_Cus into @productID

end

set @QUERY =@QUERY+''','''+cast(@item as varchar)

set @item=0

--set @temp=@temp+1

if @temp=77

begin

set @QUERY=@QUERY+''','''

SET @QUERY = SUBSTRING(@QUERY,1,LEN(@QUERY)-2)

set @QUERY=@QUERY+')'

print(@QUERY)

set @temp=0

set @QUERY='INSERT INTO [dbo].[EU\_FPGrowth] values('''+@cusID

fetch next from cus\_ID into @cusID

fetch next from cursor\_Cus into @productID

end

end

close cursor\_Cus

DEALLOCATE cursor\_Cus

declare @cusID\_last nchar(5)

set @cusID\_last=(select top 1 O.CustomerID

from dbo.Orders as O inner join dbo.[Order Details] as OD on O.OrderID=OD.OrderID inner join dbo.Customers as C on C.CustomerID=O.CustomerID

where C.Country not in('Argentina','Austria','Brazil','Canada','Mexico','Venezuela','USA')

order by O.CustomerID DESC)

if @cusID=@cusID\_last

break;

end

end

close cus\_ID

DEALLOCATE cus\_ID

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