

```
--CAU 2:
USE Northwind
GO
--Viết Hàm:
CREATE FUNCTION dbo.TenNhanVienDayDu
    (@MaNhanVien int)
RETURNS nvarchar(100)
AS
BEGIN
    DECLARE @KQ nvarchar(100)
    SELECT @KQ = FirstName + ' ' + LastName
    FROM Employees
    WHERE EmployeeID=@MaNhanVien

    RETURN @KQ
END

--TEST hàm: chú ý mã nhân viên trong bảng Employees: từ 1 đến 9
SELECT dbo.TenNhanVienDayDu (2) AS HoTenNhanVien
PRINT dbo.TenNhanVienDayDu (7)
PRINT dbo.TenNhanVienDayDu (15)--Không có mã nhân viên 15
PRINT dbo.TenNhanVienDayDu (9)
PRINT dbo.TenNhanVienDayDu (5)
-----

--CAU 3:
USE Northwind
GO
--Viết Hàm:
CREATE FUNCTION dbo.SLKhachHangCuaQuocGia
    (@TenQuocGia nvarchar(15))
RETURNS int
AS
BEGIN
    DECLARE @KQ int
    SELECT @KQ= Count(*)
    FROM Customers
    WHERE Country=@TenQuocGia
    RETURN @KQ
END

--TEST hàm:
SELECT dbo.SLKhachHangCuaQuocGia (N'USA') AS SoLuongKhachHang
PRINT dbo.SLKhachHangCuaQuocGia (N'Brazil')
-----

--CAU 4:
USE Northwind
GO
--Viết Hàm:
CREATE FUNCTION dbo.SLDonHangCuaKhachHang1
    (@TenCongTyKhachHang nvarchar(40))
RETURNS int
```

```

AS
BEGIN
    DECLARE @KQ int
    SELECT @KQ= Count(OrderID)
    FROM Customers, Orders
    WHERE Customers.CustomerID= Orders.CustomerID
        AND CompanyName=@TenCongTyKhachHang
    RETURN @KQ
END

--TEST hàm:
SELECT dbo.SLDonHangCuaKhachHang1 (N'Ernst Handel') AS SoLuongDonHang
PRINT dbo.SLDonHangCuaKhachHang1 (N'Around the Horn')-->kq 13 don hang
-----

--CAU 9:
USE Northwind
GO
--Viết Hàm:
CREATE FUNCTION dbo.DSDonHangCuaQuocGiaKhachHang1
    (@TenCongTyKhachHang nvarchar(40))
RETURNS TABLE
AS RETURN
(
    SELECT Orders.*
    FROM Orders, Customers
    WHERE Customers.CustomerID= Orders.CustomerID
        AND CompanyName=@TenCongTyKhachHang
)

--TEST hàm:
SELECT *
FROM dbo.DSDonHangCuaQuocGiaKhachHang1 (N'Ernst Handel')
--> 30 đơn hàng
SELECT *
FROM dbo.DSDonHangCuaQuocGiaKhachHang1 (N'Around the Horn')
--> 13 đơn hàng
-----

--CAU 10:
USE Northwind
GO
--Viết Hàm:
CREATE FUNCTION dbo.DSDonHangCuaQuocGiaKhachHang2
    (@TenCongTyKhachHang nvarchar(40))
RETURNS TABLE
AS RETURN
(
    SELECT Orders.OrderID, CONVERT(char(10),OrderDate,103)AS NgayDonHang
        ,SUM(UnitPrice*Quantity*(1-Discout)) AS TongTienDonHangPhaiTra
    FROM Customers, Orders, [Order Details]
    WHERE [Order Details].OrderID= Orders.OrderID
        AND Orders.CustomerID=Customers.CustomerID
        AND CompanyName=@TenCongTyKhachHang
    GROUP BY Orders.OrderID, CONVERT(nchar(10),OrderDate,103)
)

```

```

)
--TEST hàm:
SELECT *
FROM dbo.DSDonHangCuaQuocGiaKhachHang2 (N'Around the Horn')
--> 13 đơn hàng
SELECT OrderID, NgayDonHang
      , STR(TongTienDonHangPhaiTra,10,2) AS TongTienDonHangPhaiTraDaLamTron
FROM dbo.DSDonHangCuaQuocGiaKhachHang2 (N'Ernst Handel')
--> 30 đơn hàng

```

--Câu 11:

```

use Northwind
go

```

```

CREATE FUNCTION dbo.DSHangHoaCuaKhachHang1
(
    @MaKhachHang nchar(5)
)
RETURNS TABLE
AS RETURN
(
    SELECT Products.ProductID, ProductName, SUM(Quantity) AS TongSoLuong
    FROM Products, [Order Details], Orders
    WHERE Products.ProductID = [Order Details].ProductID
        AND [Order Details].OrderID = Orders.OrderID
        AND CustomerID = @MaKhachHang
    GROUP BY Products.ProductID, ProductName
)

```

-----TEST câu 11

```

SELECT * FROM dbo.DSHangHoaCuaKhachHang1 (N'ANTON') --15 sản phẩm
SELECT * FROM dbo.DSHangHoaCuaKhachHang1 (N'BONAP') --34 sản phẩm
SELECT * FROM dbo.DSHangHoaCuaKhachHang1 (NULL) --0 sản phẩm

```

--Câu 12: phải dùng cách khai báo table sẽ return

```

use Northwind
go

```

```

CREATE FUNCTION dbo.DSHangHoaCuaKhachHang2
(
    @MaKhachHang nchar(5)
)
RETURNS @KQ TABLE
(
    ProductID int,
    ProductName nvarchar(40),
    TongSoLuong int
)
AS

```

```
BEGIN
    IF (@MaKhachHang IS NULL)
        INSERT INTO @KQ
            SELECT Products.ProductID, ProductName, SUM(Quantity)
            FROM Products, [Order Details]
            WHERE Products.ProductID = [Order Details].ProductID
            GROUP BY Products.ProductID, ProductName
    ELSE
        INSERT INTO @KQ
            SELECT Products.ProductID, ProductName, SUM(Quantity)
            FROM Products, [Order Details], Orders
            WHERE Products.ProductID = [Order Details].ProductID
                AND [Order Details].OrderID = Orders.OrderID
                AND CustomerID = @MaKhachHang
            GROUP BY Products.ProductID, ProductName

    RETURN
END
-----TEST

SELECT * FROM dbo.DSHangHoaCuaKhachHang2 (NULL) --77 sản phẩm (tất cả)
SELECT * FROM dbo.DSHangHoaCuaKhachHang2 (N'ANTON') --15 sản phẩm
```