Họ tên: Lê Ngọc Phương Thảo

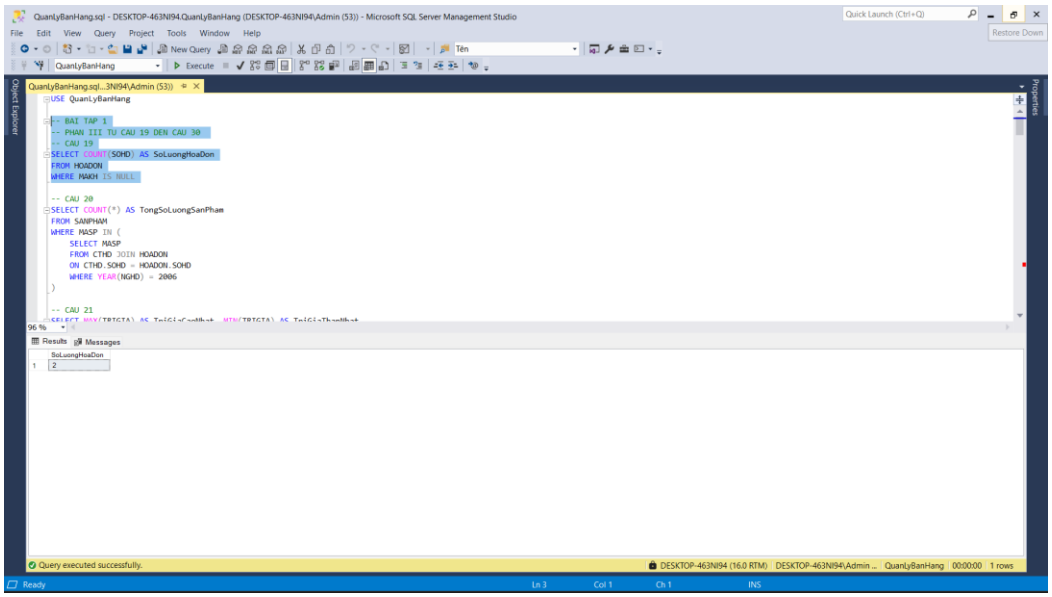
MSSV: 23521467 **Lớp: IT004.P113**

Github: github.com/lngphgthao/IT004.P113

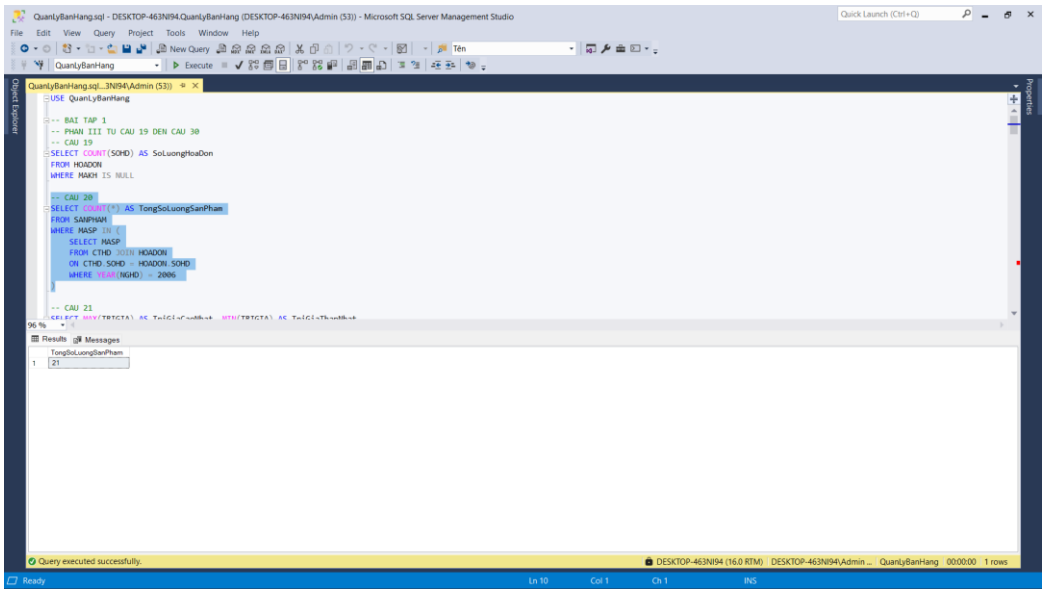
Lab 4

Bài tập 1:

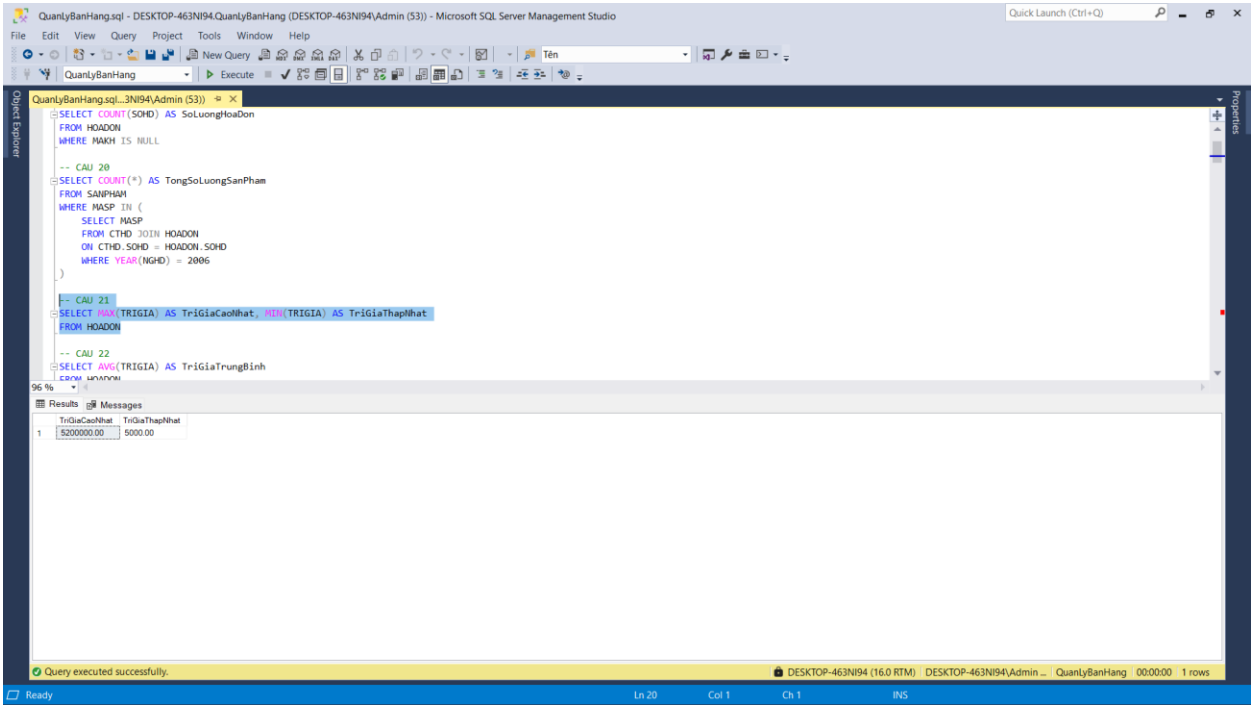
Câu 19:



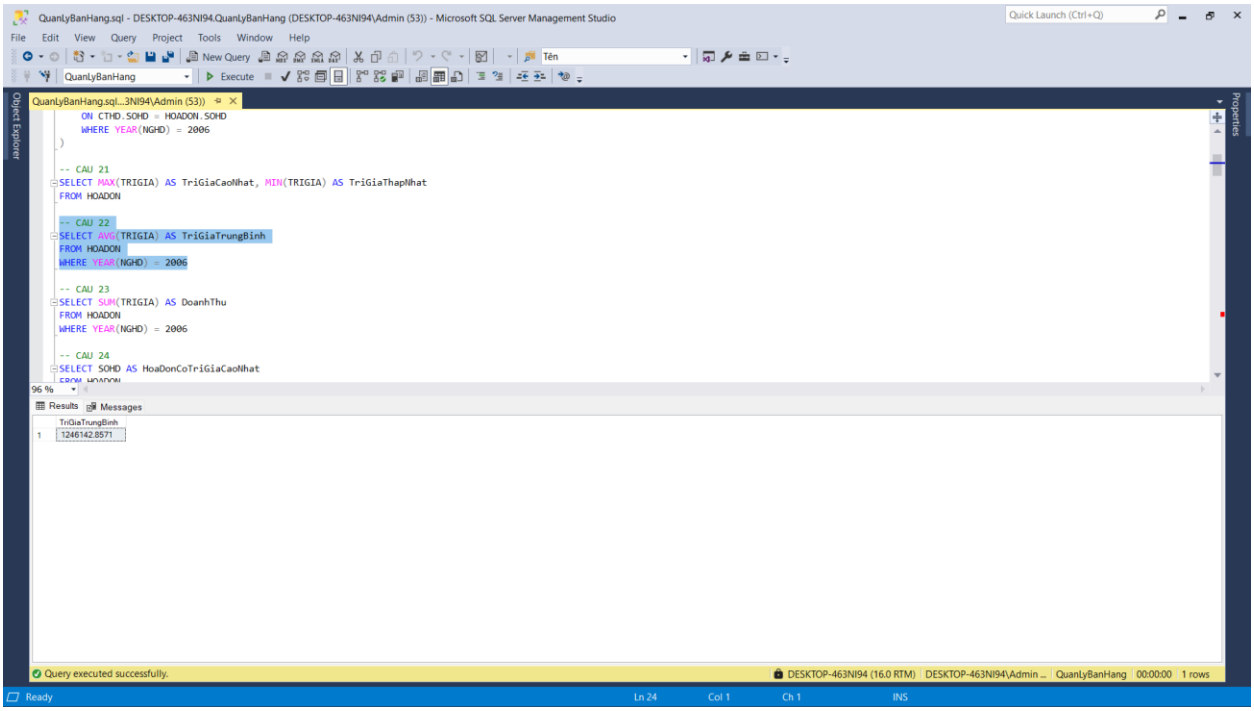
Câu 20:



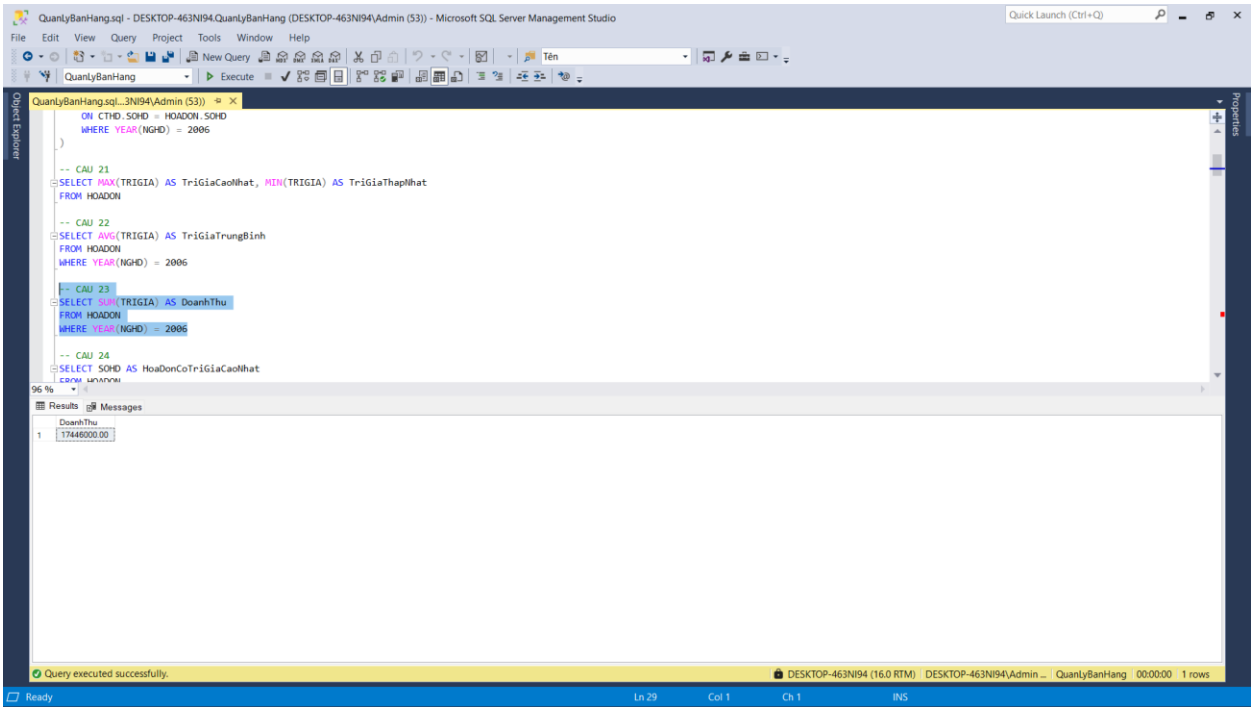
Câu 21:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
SELECT COUNT(SOHD) AS SoLuongHoaDon
FROM HOADON
WHERE MAKH IS NULL
-- CAU 20
SELECT COUNT(*) AS TongSoLuongSanPham
FROM SANPHAM
WHERE MASP IN (
SELECT MASP
FROM CTHD JOIN HOADON
ON CTHD.SOHD = HOADON.SOHD
WHERE YEAR(NGHD) = 2006
)
-- CAU 21
SELECT MAX(TRIGIA) AS TriGiaCaoNhat, MIN(TRIGIA) AS TriGiaThapNhat
FROM HOADON
-- CAU 22
SELECT AVG(TRIGIA) AS TriGiaTrungBinh
Results
Messages
TriGiaCaoNhat TriGiaThapNhat
1 5200000.00 5000.00
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 1 rows
Ready
Ln 20 Col 1 Ch 1 INS

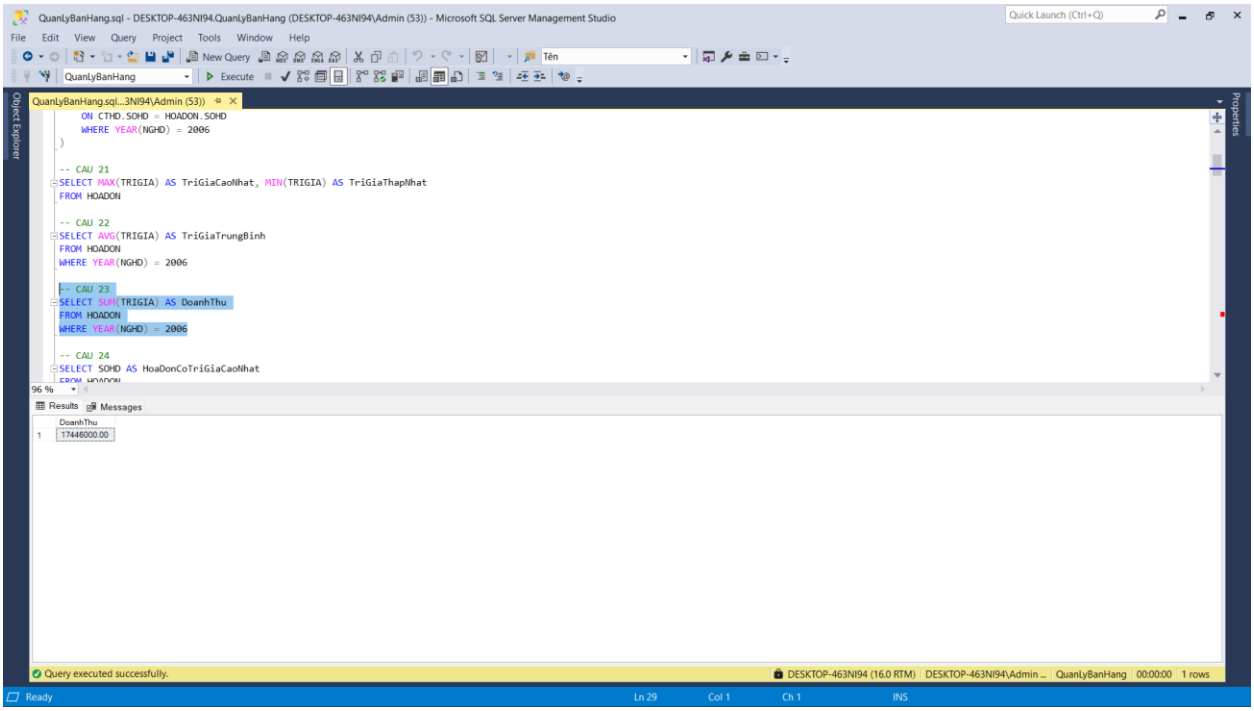
Câu 22:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
ON CTHD.SOHD = HOADON.SOHD
WHERE YEAR(NGHD) = 2006
)
-- CAU 21
SELECT MAX(TRIGIA) AS TriGiaCaoNhat, MIN(TRIGIA) AS TriGiaThapNhat
FROM HOADON
-- CAU 22
SELECT AVG(TRIGIA) AS TriGiaTrungBinh
FROM HOADON
WHERE YEAR(NGHD) = 2006
-- CAU 23
SELECT SUM(TRIGIA) AS DoanhThu
FROM HOADON
WHERE YEAR(NGHD) = 2006
-- CAU 24
SELECT SOHD AS HoaDonCoTriGiaCaoNhat
Results
Messages
TriGiaTrungBinh
1 1246142.8571
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 1 rows
Ready
Ln 24 Col 1 Ch 1 INS

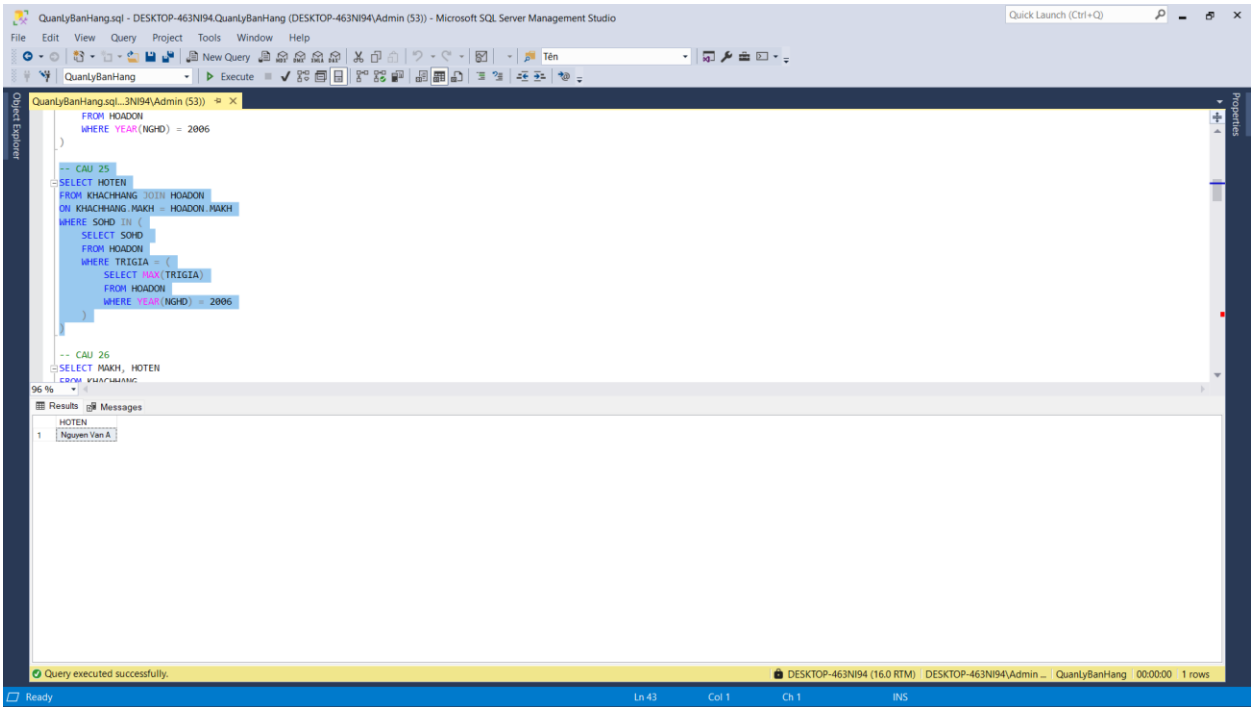
Câu 23:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
ON CTHD.SOHD = HOADON.SOHD
WHERE YEAR(NGHD) = 2006
)
-- CAU 21
SELECT MAX(TRIGIA) AS TriGiaCaoNhat, MIN(TRIGIA) AS TriGiaThapNhat
FROM HOADON
-- CAU 22
SELECT AVG(TRIGIA) AS TriGiaTrungBinh
FROM HOADON
WHERE YEAR(NGHD) = 2006
-- CAU 23
SELECT SUM(TRIGIA) AS DoanhThu
FROM HOADON
WHERE YEAR(NGHD) = 2006
-- CAU 24
SELECT SOHD AS HoaDonCoTriGiaCaoNhat
Results
Messages
DoanhThu
1
17446000.00
Query executed successfully.
Ready
Ln 29
Col 1
Ch 1
INS

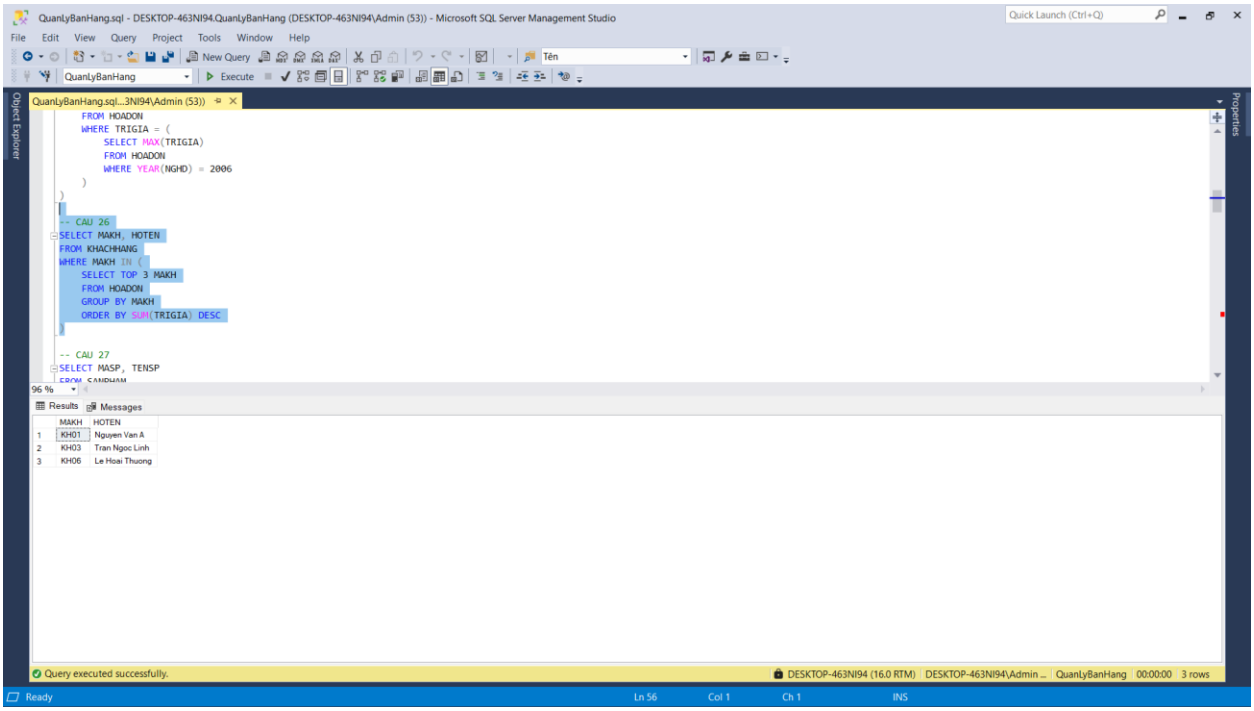
Câu 24:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
ON CTHD.SOHD = HOADON.SOHD
WHERE YEAR(NGHD) = 2006
)
-- CAU 21
SELECT MAX(TRIGIA) AS TriGiaCaoNhat, MIN(TRIGIA) AS TriGiaThapNhat
FROM HOADON
-- CAU 22
SELECT AVG(TRIGIA) AS TriGiaTrungBinh
FROM HOADON
WHERE YEAR(NGHD) = 2006
-- CAU 23
SELECT SUM(TRIGIA) AS DoanhThu
FROM HOADON
WHERE YEAR(NGHD) = 2006
-- CAU 24
SELECT SOHD AS HoaDonCoTriGiaCaoNhat
Results
Messages
DoanhThu
1
17446000.00
Query executed successfully.
Ready
Ln 29
Col 1
Ch 1
INS

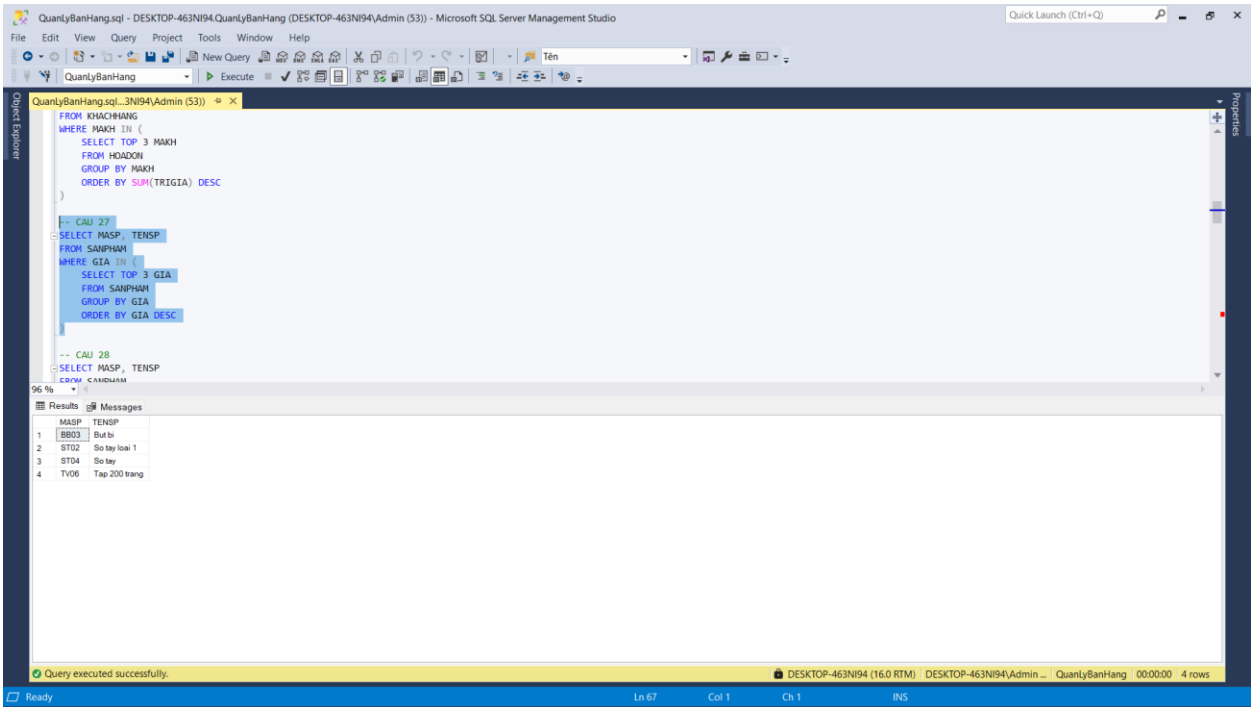
Câu 25:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
FROM HOADON
WHERE YEAR(NGHD) = 2006
)
-- CAU 25
SELECT HOTEN
FROM KHACHHANG JOIN HOADON
ON KHACHHANG.MAKH = HOADON.MAKH
WHERE SOHD IN (
SELECT SOHD
FROM HOADON
WHERE TRIGIA = (
SELECT MAX(TRIGIA)
FROM HOADON
WHERE YEAR(NGHD) = 2006
)
)
-- CAU 26
SELECT MAKH, HOTEN
Results
Messages
HOTEN
1 Nguyen Van A
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
QuanLyBanHang
00:00:00
1 rows
Ready
Ln 43
Col 1
Ch 1
INS

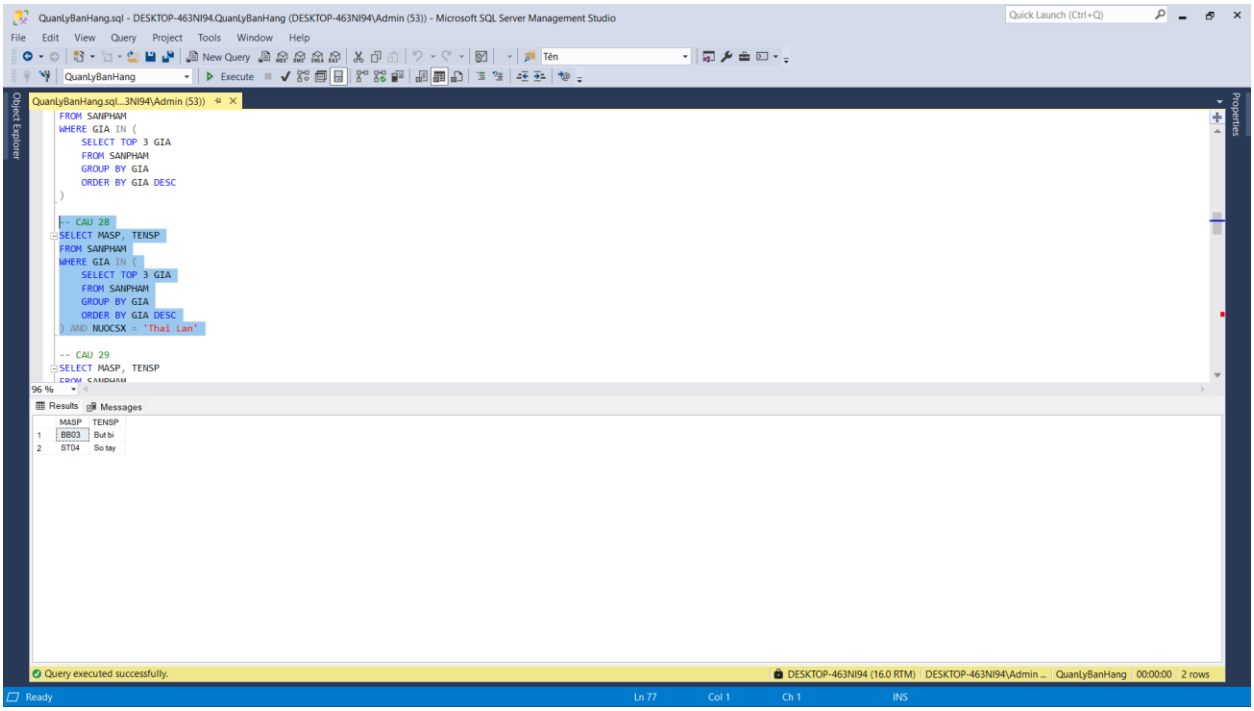
Câu 26:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
FROM HOADON
WHERE TRIGIA = (
SELECT MAX(TRIGIA)
FROM HOADON
WHERE YEAR(NGHD) = 2006
)
)
-- CAU 26
SELECT MAKH, HOTEN
FROM KHACHHANG
WHERE MAKH IN (
SELECT TOP 3 MAKH
FROM HOADON
GROUP BY MAKH
ORDER BY SUM(TRIGIA) DESC
)
-- CAU 27
SELECT MASP, TENSP
Results
Messages
MAKH HOTEN
1 KH01 Nguyen Van A
2 KH03 Tran Ngoc Linh
3 KH06 Le Hoai Thuong
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
QuanLyBanHang
00:00:00
3 rows
Ready
Ln 56
Col 1
Ch 1
INS

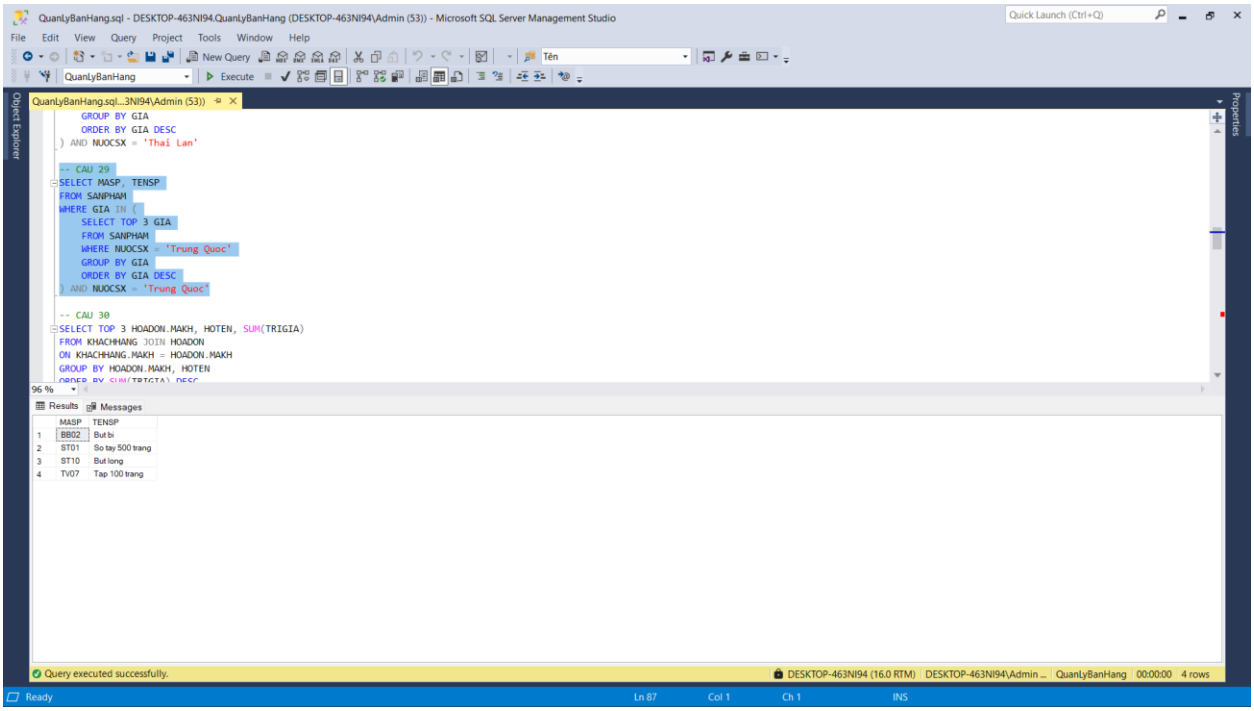
Câu 27:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
FROM KHACHHANG
WHERE MAKH IN (
SELECT TOP 3 MAKH
FROM HOADON
GROUP BY MAKH
ORDER BY SUM(TRIGIA) DESC
)
-- CAU 27
SELECT MASP, TENSP
FROM SANPHAM
WHERE GIA IN (
SELECT TOP 3 GIA
FROM SANPHAM
GROUP BY GIA
ORDER BY GIA DESC
)
-- CAU 28
SELECT MASP, TENSP
MASP TENSP
1 BB03 But bi
2 ST02 So tay loai 1
3 ST04 So tay
4 TV06 Tap 200 trang
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 4 rows
Ready
Ln 67 Col 1 Ch 1 INS

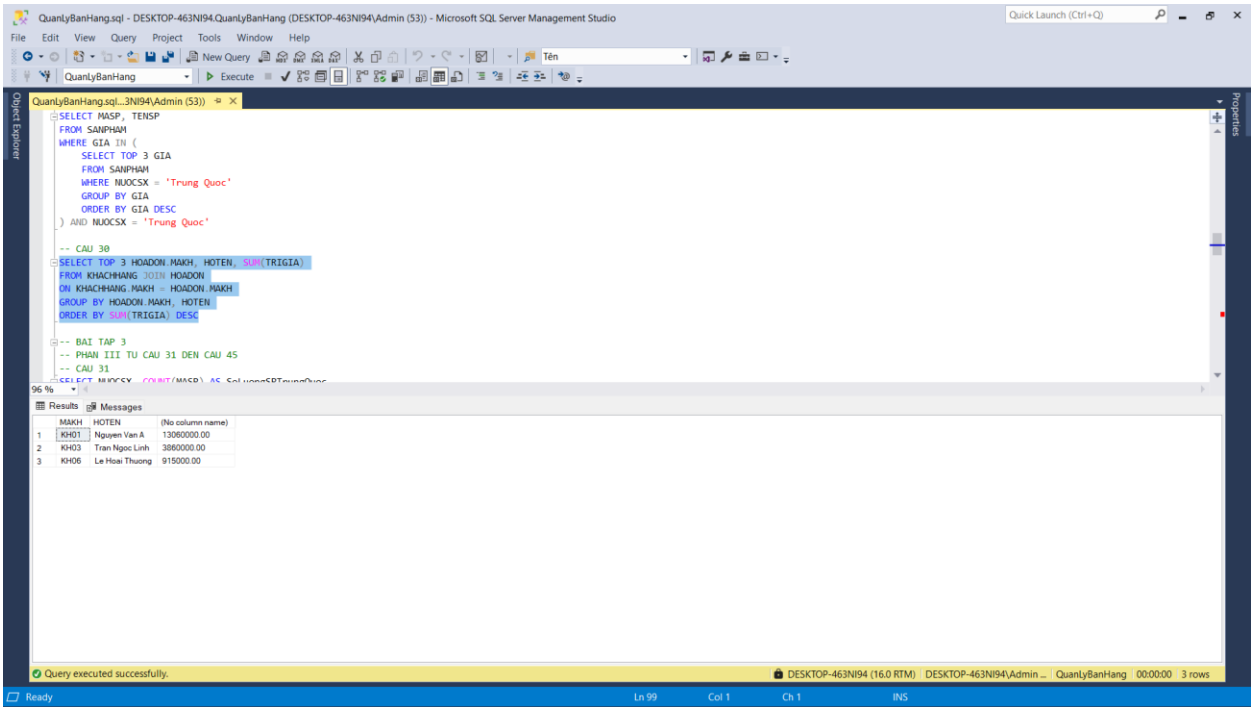
Câu 28:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
FROM SANPHAM
WHERE GIA IN (
SELECT TOP 3 GIA
FROM SANPHAM
GROUP BY GIA
ORDER BY GIA DESC
)
-- CAU 28
SELECT MASP, TENSP
FROM SANPHAM
WHERE GIA IN (
SELECT TOP 3 GIA
FROM SANPHAM
GROUP BY GIA
ORDER BY GIA DESC
) AND NUOCSX = 'Thai Lan'
-- CAU 29
SELECT MASP, TENSP
MASP TENSP
1 BB03 But bi
2 ST04 So tay
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 2 rows
Ready
Ln 77 Col 1 Ch 1 INS

Câu 29:

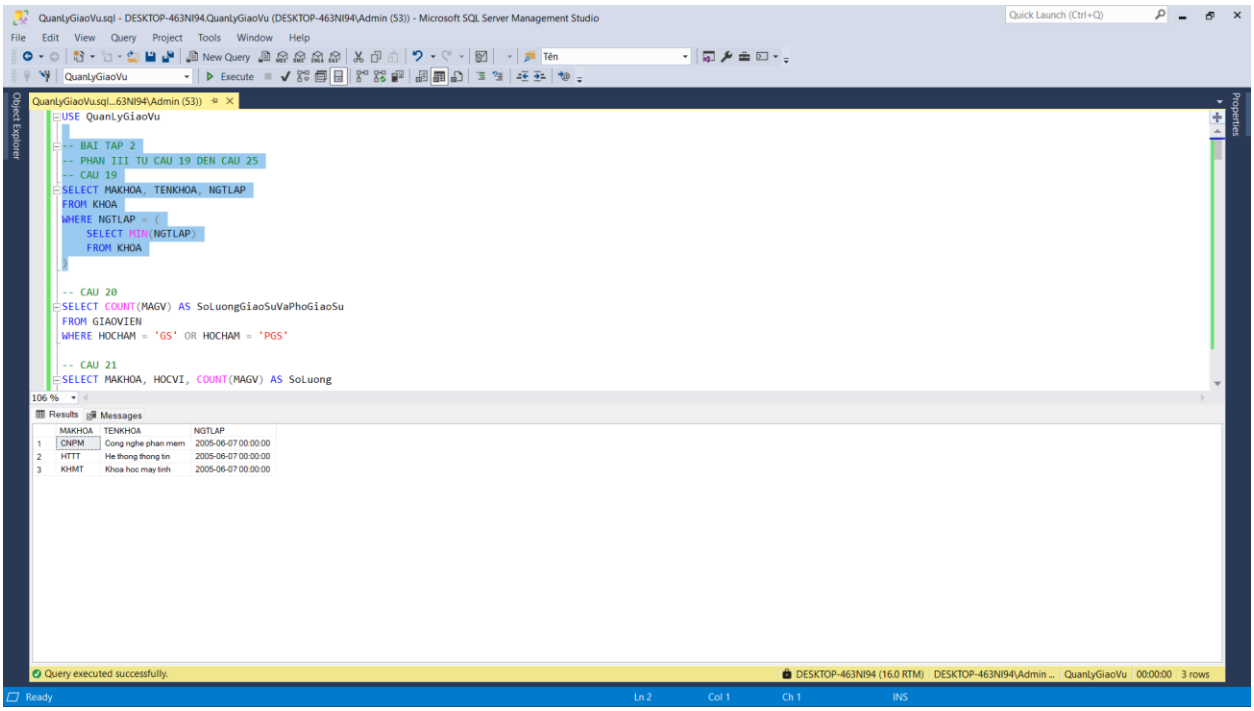

QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
GROUP BY GIA
ORDER BY GIA DESC
) AND NUOCSX = 'Thai Lan'
-- CAU 29
SELECT MASP, TENSP
FROM SANPHAM
WHERE GIA IN (
SELECT TOP 3 GIA
FROM SANPHAM
WHERE NUOCSX = 'Trung Quoc'
GROUP BY GIA
ORDER BY GIA DESC
) AND NUOCSX = 'Trung Quoc'
-- CAU 30
SELECT TOP 3 HOADON.MAKH, HOTEN, SUM(TRIGIA)
FROM KHACHHANG JOIN HOADON
ON KHACHHANG.MAKH = HOADON.MAKH
GROUP BY HOADON.MAKH, HOTEN
Results
Messages
MASP TENSP
1 BB02 But bi
2 ST01 So tay 500 trang
3 ST10 But long
4 TV07 Tap 100 trang
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
QuanLyBanHang
00:00:00
4 rows
Ready
Ln 87
Col 1
Ch 1
INS

Câu 30:

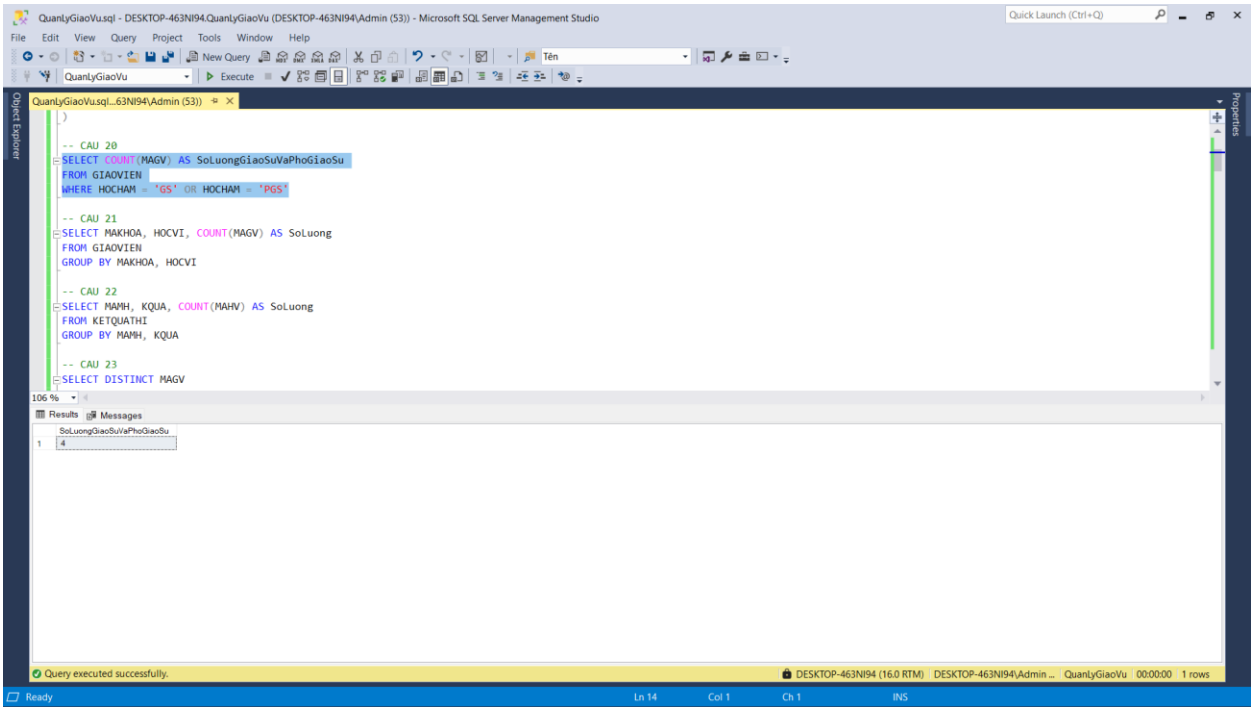

QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
SELECT MASP, TENSP
FROM SANPHAM
WHERE GIA IN (
SELECT TOP 3 GIA
FROM SANPHAM
WHERE NUOCSX = 'Trung Quoc'
GROUP BY GIA
ORDER BY GIA DESC
) AND NUOCSX = 'Trung Quoc'
-- CAU 30
SELECT TOP 3 HOADON.MAKH, HOTEN, SUM(TRIGIA)
FROM KHACHHANG JOIN HOADON
ON KHACHHANG.MAKH = HOADON.MAKH
GROUP BY HOADON.MAKH, HOTEN
ORDER BY SUM(TRIGIA) DESC
-- BAI TAP 3
-- PHAN III TU CAU 31 DEN CAU 45
-- CAU 31
Results
Messages
MAKH HOTEN (No column name)
1 KH01 Nguyen Van A 13060000.00
2 KH03 Tran Ngoc Linh 3860000.00
3 KH06 Le Hoai Thuong 915000.00
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
QuanLyBanHang
00:00:00
3 rows
Ready
Ln 99
Col 1
Ch 1
INS

Bài tập 2:

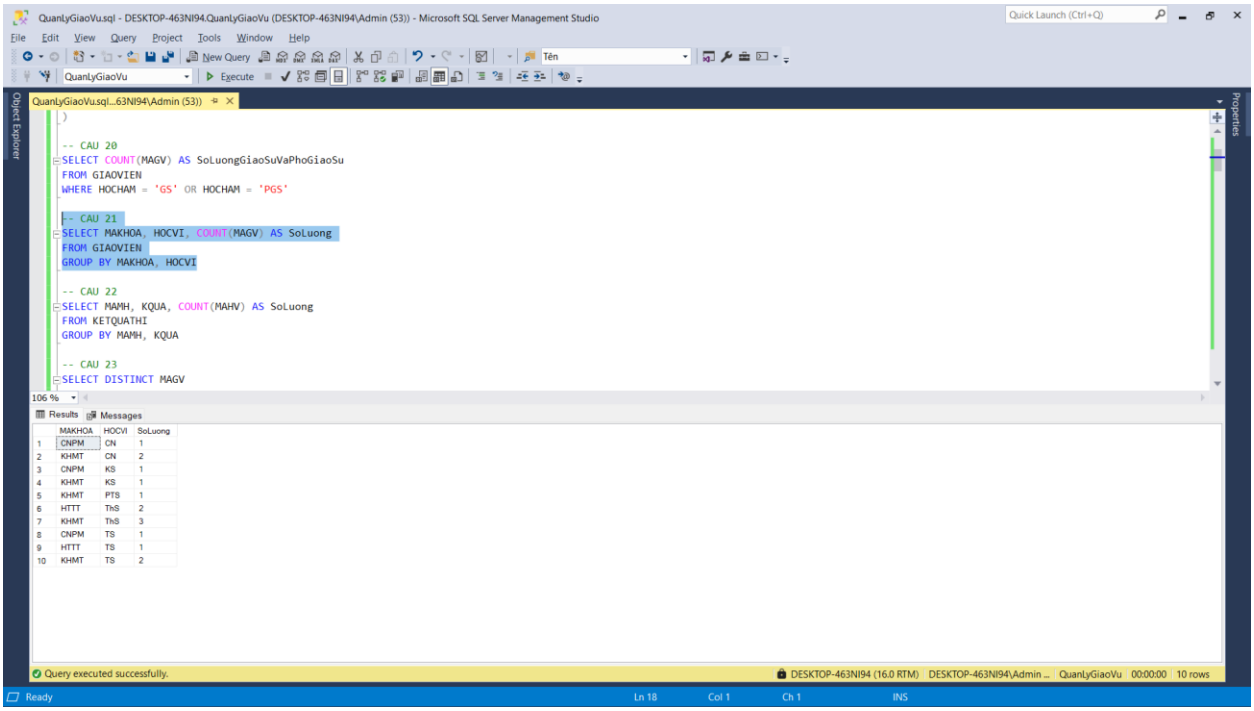
Câu 19:



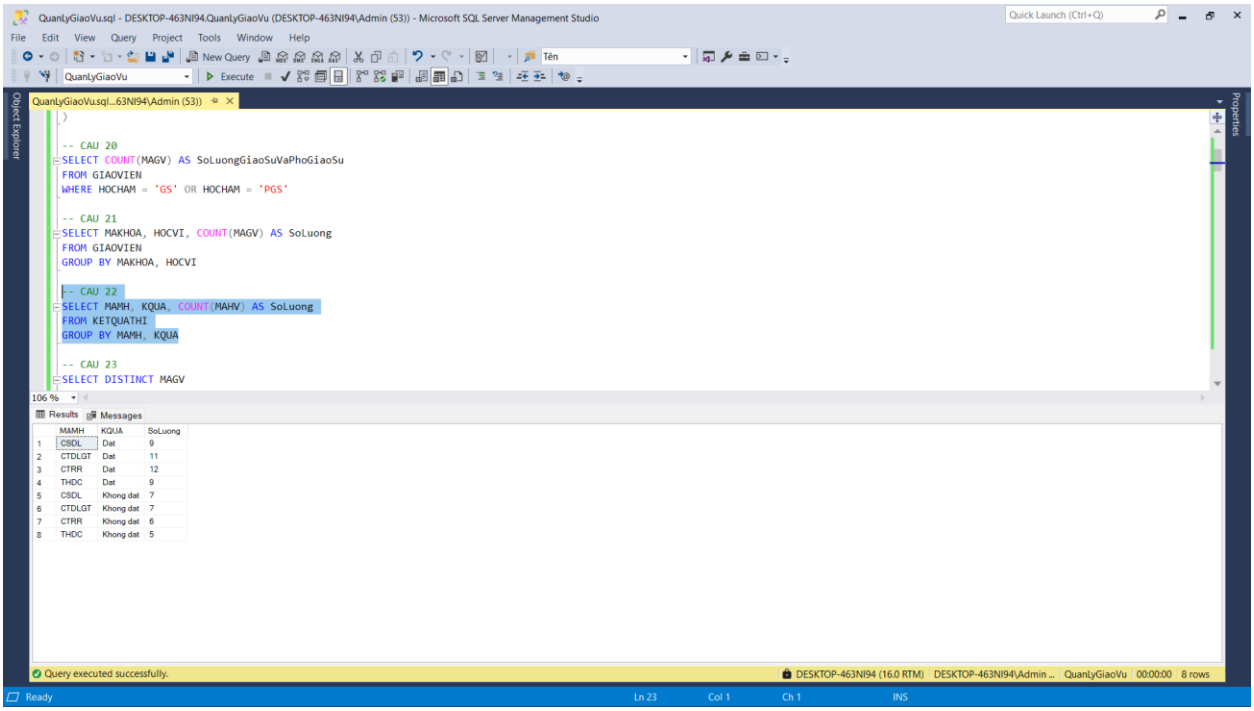
Câu 20:



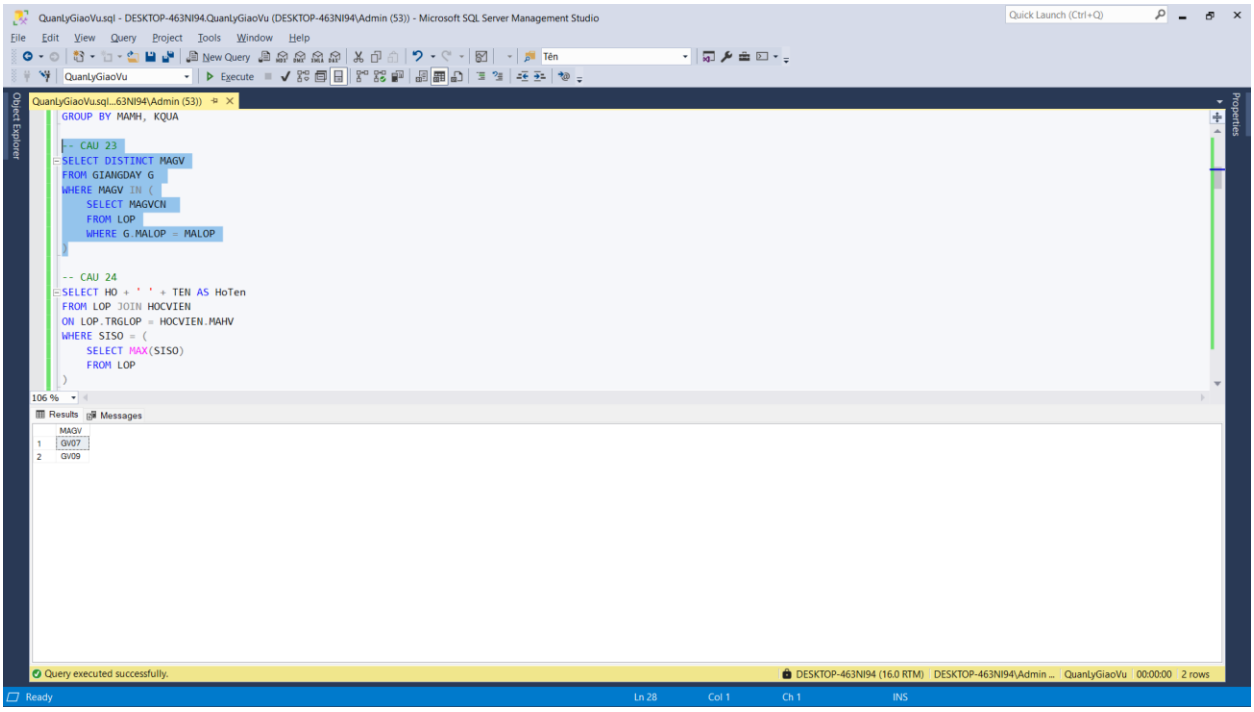
Câu 21:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 20
SELECT COUNT(MAGV) AS SoLuongGiaoSuVaPhoGiaoSu
FROM GIAOVIEN
WHERE HOCHAM = 'GS' OR HOCHAM = 'PGS'
-- CAU 21
SELECT MAKHOA, HOCVI, COUNT(MAGV) AS SoLuong
FROM GIAOVIEN
GROUP BY MAKHOA, HOCVI
-- CAU 22
SELECT MAMH, KQUA, COUNT(MAHV) AS SoLuong
FROM KETQUATHI
GROUP BY MAMH, KQUA
-- CAU 23
SELECT DISTINCT MAGV
Results
Messages
MAKHOA HOCVI SoLuong
CNPM CN 1
KHMT CN 2
CNPM KS 1
KHMT KS 1
KHMT PTS 1
HTTT ThS 2
KHMT ThS 3
CNPM TS 1
HTTT TS 1
KHMT TS 2
Query executed successfully.
Ready

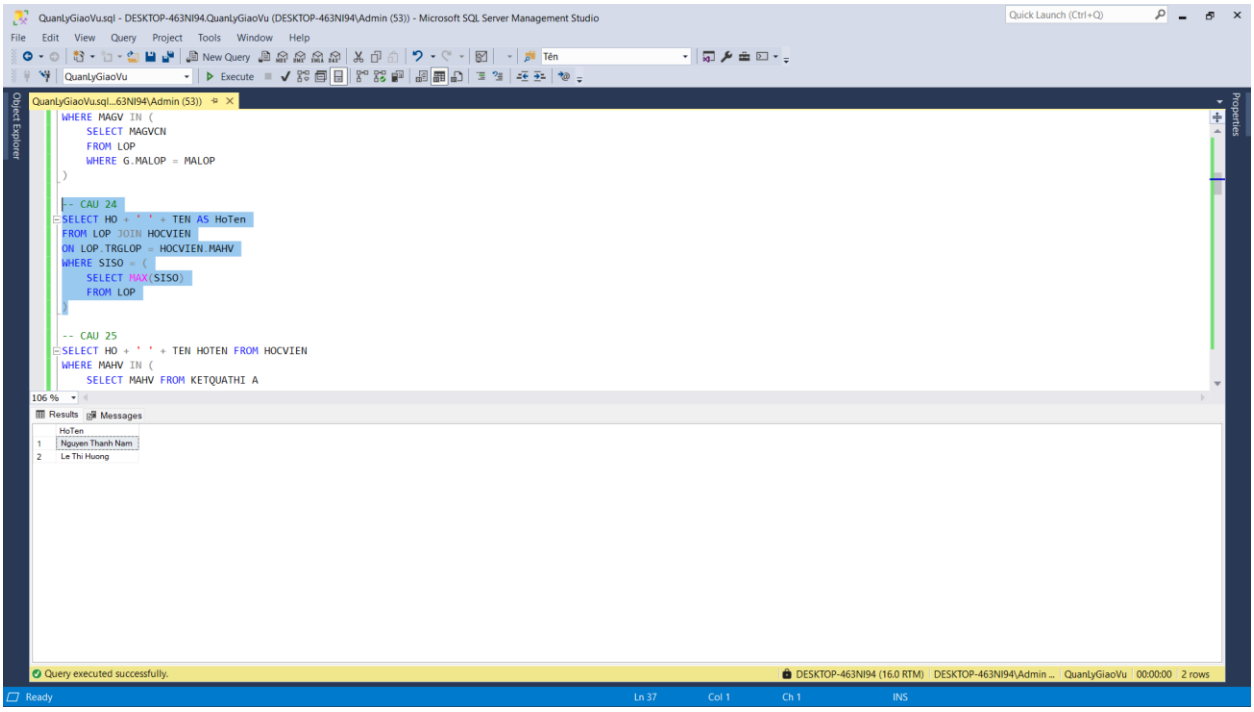
Câu 22:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 20
SELECT COUNT(MAGV) AS SoLuongGiaoSuVaPhoGiaoSu
FROM GIAOVIEN
WHERE HOCHAM = 'GS' OR HOCHAM = 'PGS'
-- CAU 21
SELECT MAKHOA, HOCVI, COUNT(MAGV) AS SoLuong
FROM GIAOVIEN
GROUP BY MAKHOA, HOCVI
-- CAU 22
SELECT MAMH, KQUA, COUNT(MAHV) AS SoLuong
FROM KETQUATHI
GROUP BY MAMH, KQUA
-- CAU 23
SELECT DISTINCT MAGV
Results
Messages
MAMH KQUA SoLuong
CSDL Dat 9
CTDLGT Dat 11
CTRR Dat 12
THDC Dat 9
CSDL Khong dat 7
CTDLGT Khong dat 7
CTRR Khong dat 6
THDC Khong dat 5
Query executed successfully.
Ready

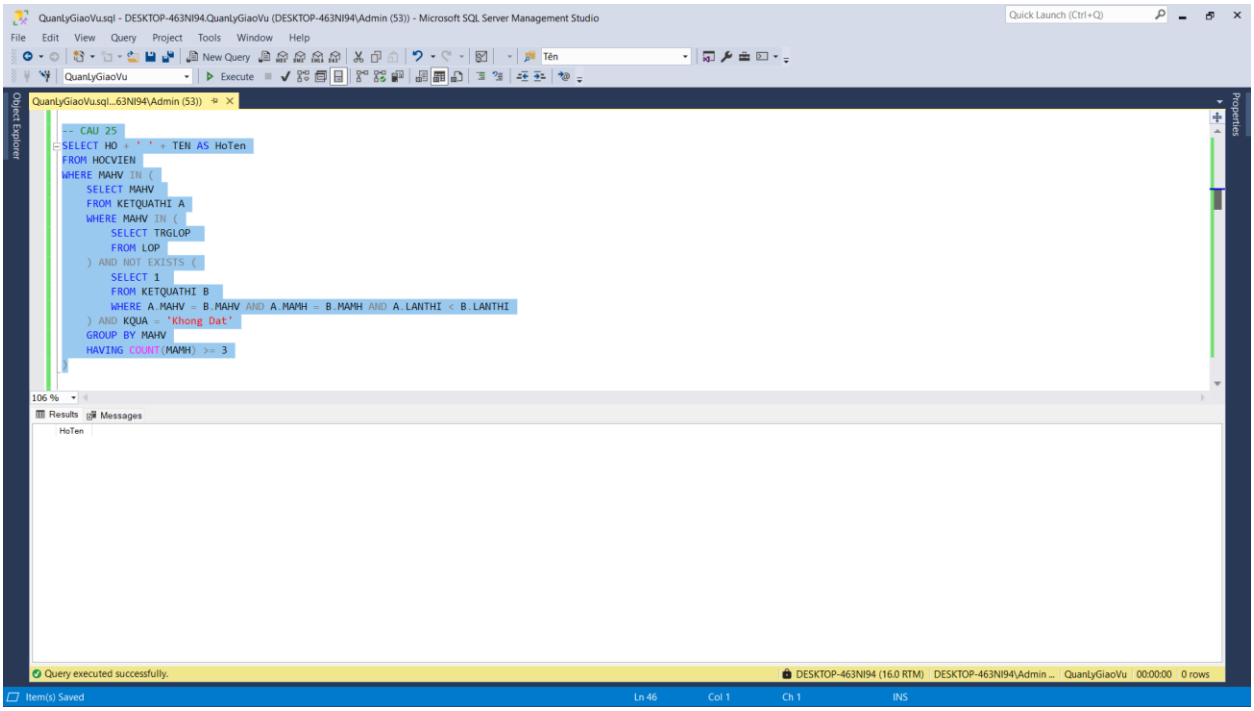
Câu 23:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
GROUP BY MAMH, KQUA
-- CAU 23
SELECT DISTINCT MAGV
FROM GIANGDAY G
WHERE MAGV IN (
SELECT MAGVCN
FROM LOP
WHERE G.MALOP = MALOP
)
-- CAU 24
SELECT HO + ' ' + TEN AS HoTen
FROM LOP JOIN HOCVIEN
ON LOP.TRGLOP = HOCVIEN.MAHV
WHERE SISO = (
SELECT MAX(SISO)
FROM LOP
)
Results
Messages
MAGV
GV07
GV09
Query executed successfully.
Ready

Câu 24:

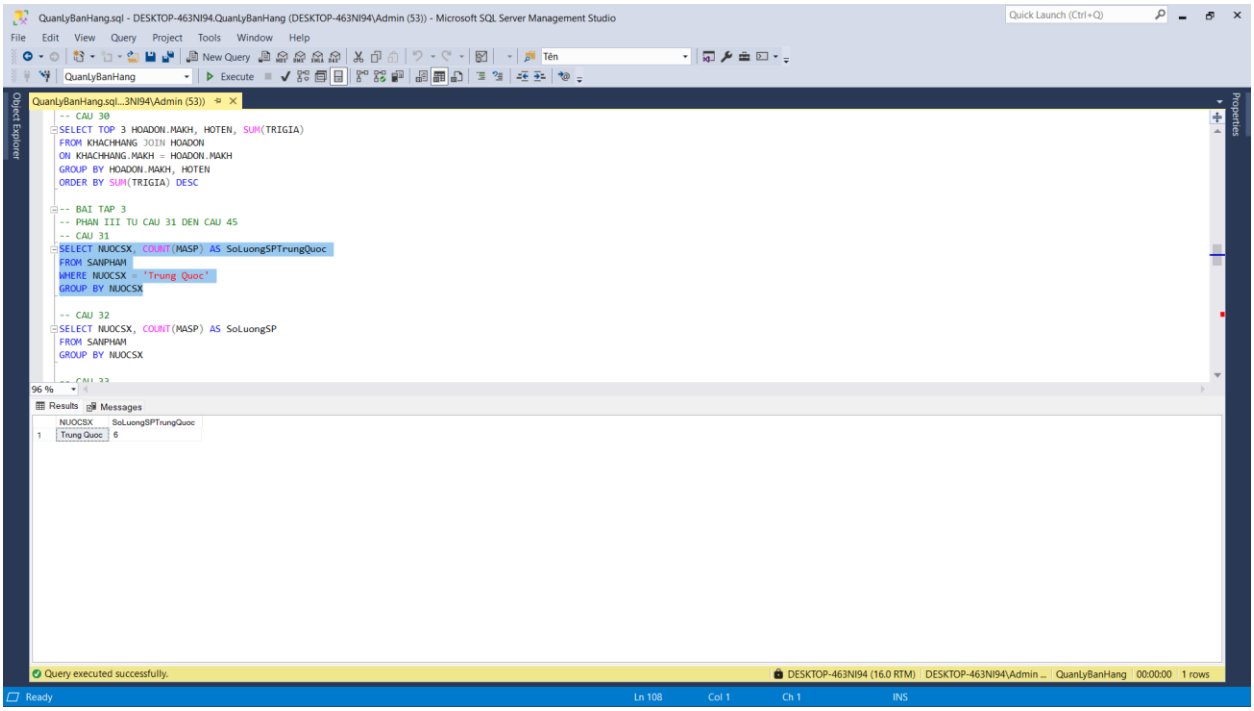

QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
WHERE MAGV IN (
SELECT MAGVCN
FROM LOP
WHERE G.MALOP = MALOP
)
-- CAU 24
SELECT HO + ' ' + TEN AS HoTen
FROM LOP JOIN HOCVIEN
ON LOP.TRGLOP = HOCVIEN.MAHV
WHERE SISO = (
SELECT MAX(SISO)
FROM LOP
)
-- CAU 25
SELECT HO + ' ' + TEN HOTEN FROM HOCVIEN
WHERE MAHV IN (
SELECT MAHV FROM KETQUATHI A
Results
Messages
HoTen
Nguyen Thanh Nam
Le Thi Huong
Query executed successfully.
Ready

Câu 25:

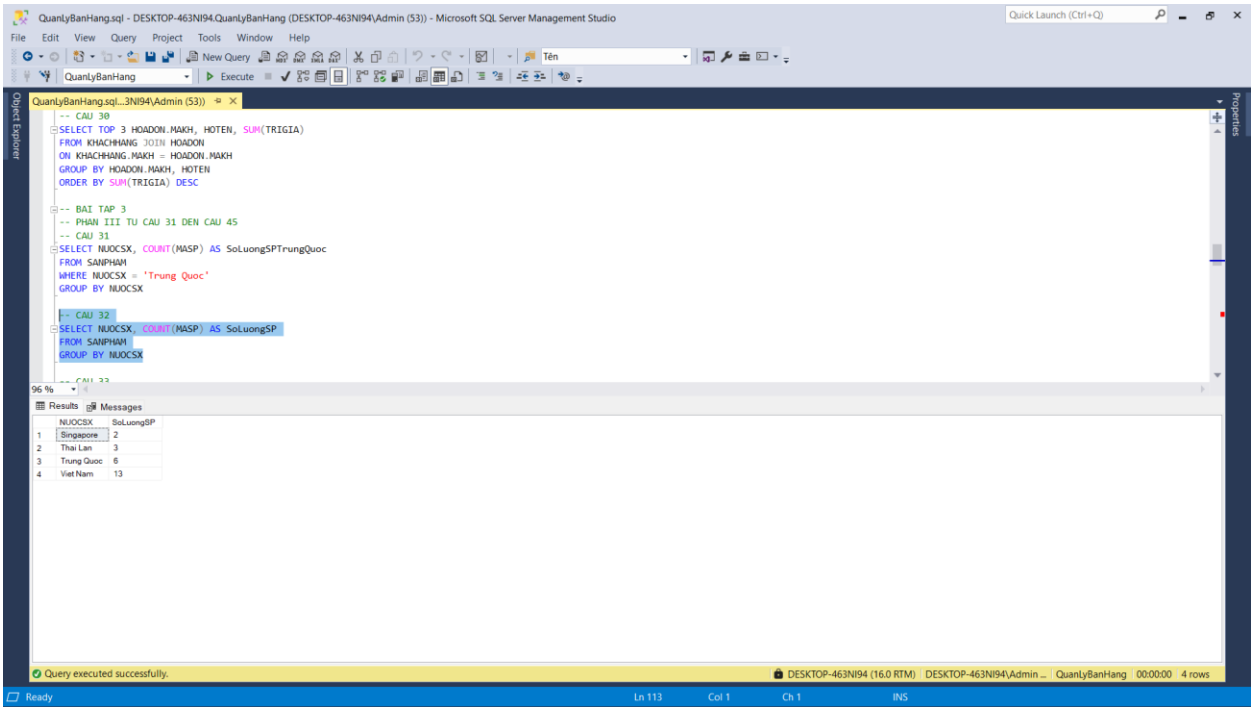


Bài tập 3:

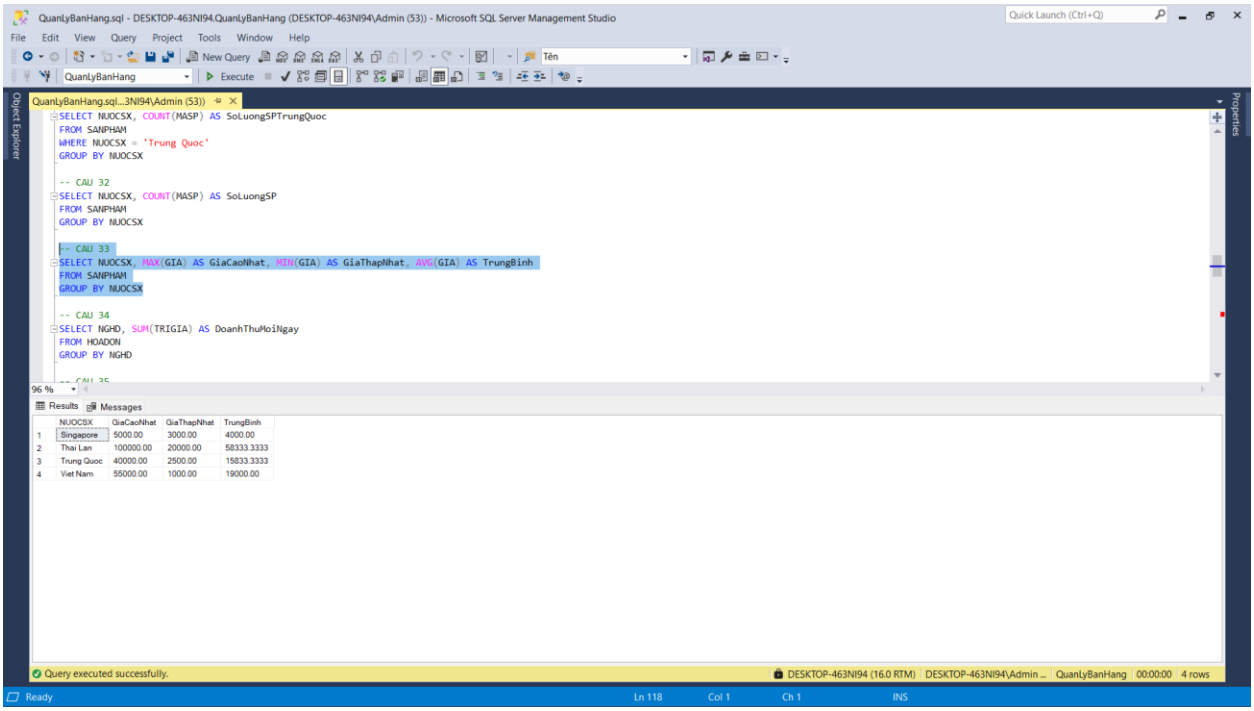
Câu 31:



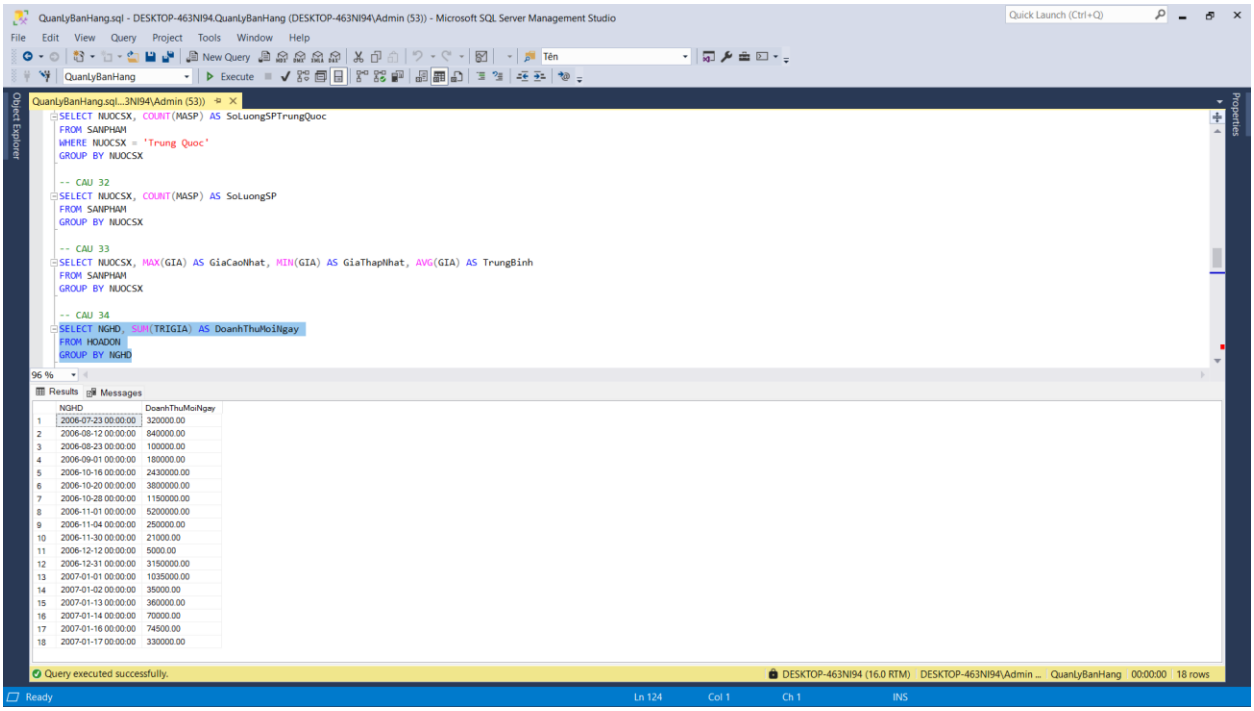
Câu 32:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 30
SELECT TOP 3 HOADON.MAKH, HOTEN, SUM(TRIGIA)
FROM KHACHHANG JOIN HOADON
ON KHACHHANG.MAKH = HOADON.MAKH
GROUP BY HOADON.MAKH, HOTEN
ORDER BY SUM(TRIGIA) DESC
-- BAI TAP 3
-- PHAN III TU CAU 31 DEN CAU 45
-- CAU 31
SELECT NUOCSX, COUNT(MASP) AS SoLuongSPTrungQuoc
FROM SANPHAM
WHERE NUOCSX = 'Trung Quoc'
GROUP BY NUOCSX
-- CAU 32
SELECT NUOCSX, COUNT(MASP) AS SoLuongSP
FROM SANPHAM
GROUP BY NUOCSX
NUOCSX SoLuongSP
1 Singapore 2
2 Thai Lan 3
3 Trung Quoc 6
4 Viet Nam 13
Query executed successfully.
Ready

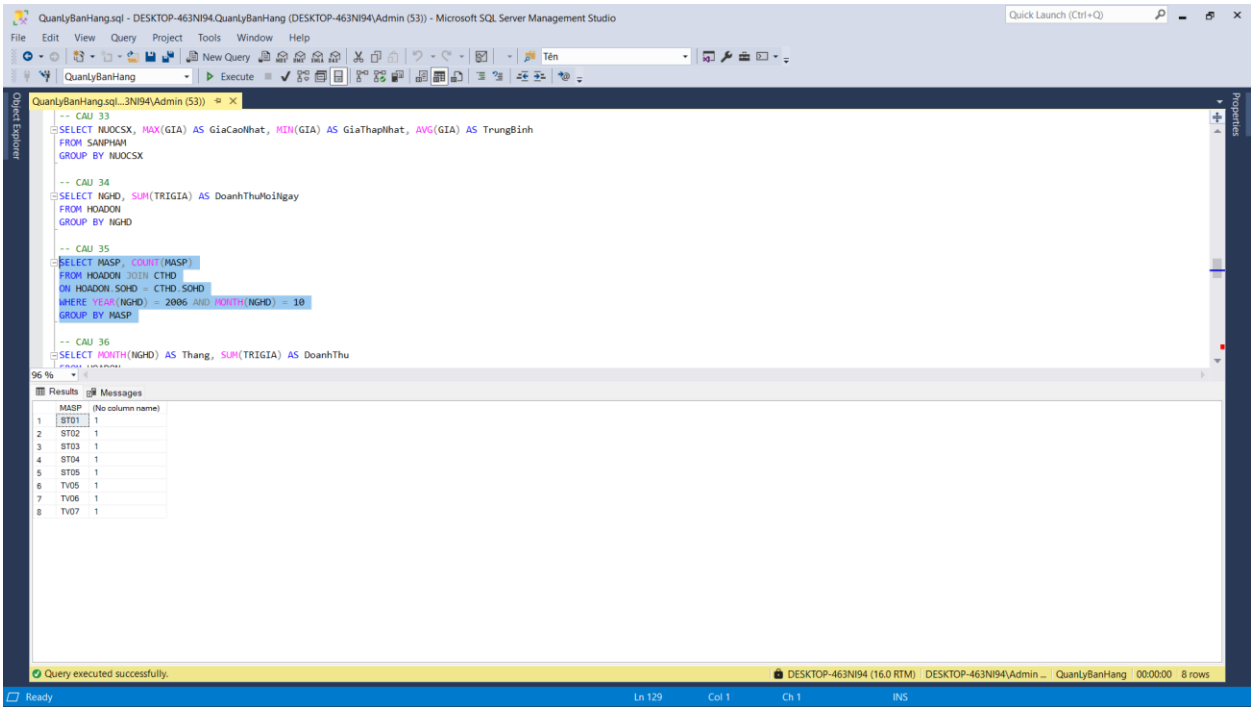
Câu 33:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
SELECT NUOCSX, COUNT(MASP) AS SoLuongSPTrungQuoc
FROM SANPHAM
WHERE NUOCSX = 'Trung Quoc'
GROUP BY NUOCSX
-- CAU 32
SELECT NUOCSX, COUNT(MASP) AS SoLuongSP
FROM SANPHAM
GROUP BY NUOCSX
-- CAU 33
SELECT NUOCSX, MAX(GIA) AS GiaCaoNhat, MIN(GIA) AS GiaThapNhat, AVG(GIA) AS TrungBinh
FROM SANPHAM
GROUP BY NUOCSX
-- CAU 34
SELECT NGHD, SUM(TRIGIA) AS DoanhThuMoiNgay
FROM HOADON
GROUP BY NGHD
NUOCSX GiaCaoNhat GiaThapNhat TrungBinh
1 Singapore 5000.00 3000.00 4000.00
2 Thai Lan 100000.00 20000.00 58333.3333
3 Trung Quoc 40000.00 2500.00 15833.3333
4 Viet Nam 55000.00 1000.00 19000.00
Query executed successfully.
Ready

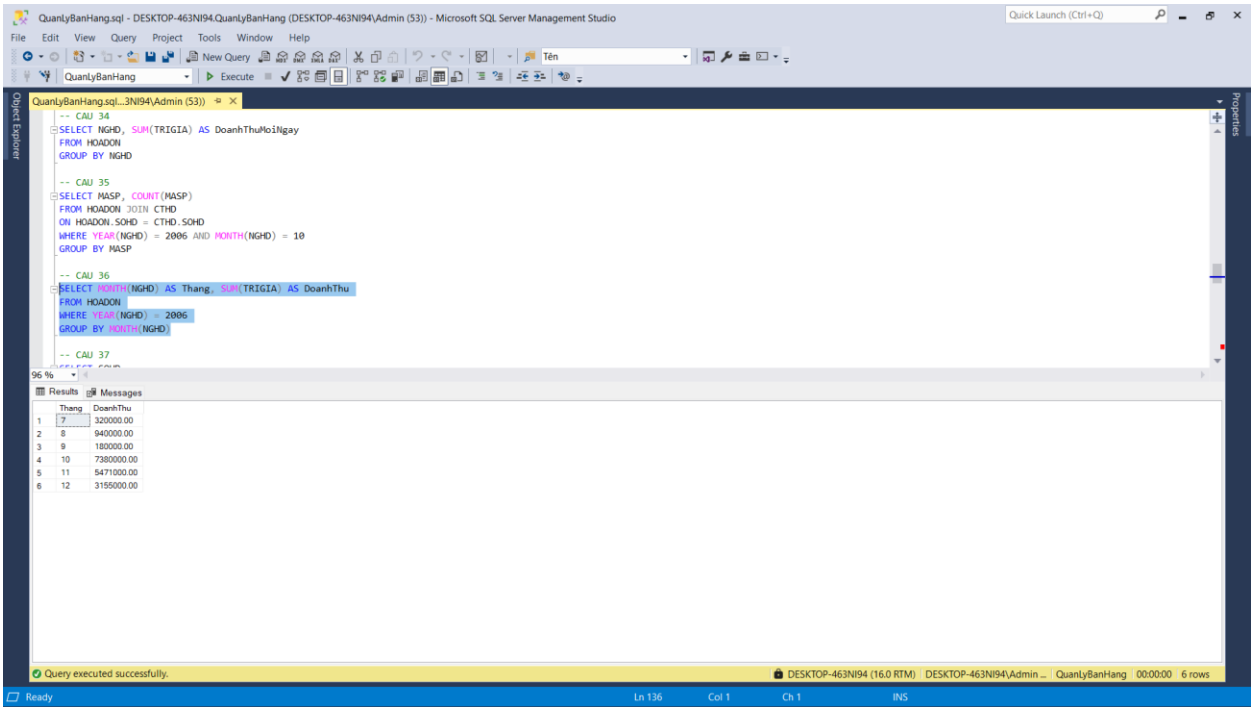
Câu 34:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
SELECT NUOCSX, COUNT(MASP) AS SoLuongSPTrungQuoc
FROM SANPHAM
WHERE NUOCSX = 'Trung Quoc'
GROUP BY NUOCSX
-- CAU 32
SELECT NUOCSX, COUNT(MASP) AS SoLuongSP
FROM SANPHAM
GROUP BY NUOCSX
-- CAU 33
SELECT NUOCSX, MAX(GIA) AS GiaCaoNhat, MIN(GIA) AS GiaThapNhat, AVG(GIA) AS TrungBinh
FROM SANPHAM
GROUP BY NUOCSX
-- CAU 34
SELECT NGHD, SUM(TRIGIA) AS DoanhThuMoiNgay
FROM HOADON
GROUP BY NGHD
Results Messages
NGHD DoanhThuMoiNgay
1 2006-07-23 00:00:00 320000.00
2 2006-08-12 00:00:00 840000.00
3 2006-08-23 00:00:00 100000.00
4 2006-09-01 00:00:00 180000.00
5 2006-10-16 00:00:00 2430000.00
6 2006-10-20 00:00:00 3800000.00
7 2006-10-28 00:00:00 1150000.00
8 2006-11-01 00:00:00 5200000.00
9 2006-11-04 00:00:00 250000.00
10 2006-11-30 00:00:00 21000.00
11 2006-12-12 00:00:00 5000.00
12 2006-12-31 00:00:00 3150000.00
13 2007-01-01 00:00:00 1035000.00
14 2007-01-02 00:00:00 35000.00
15 2007-01-13 00:00:00 360000.00
16 2007-01-14 00:00:00 70000.00
17 2007-01-16 00:00:00 74500.00
18 2007-01-17 00:00:00 330000.00
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 18 rows
Ready Ln 124 Col 1 Ch 1 INS

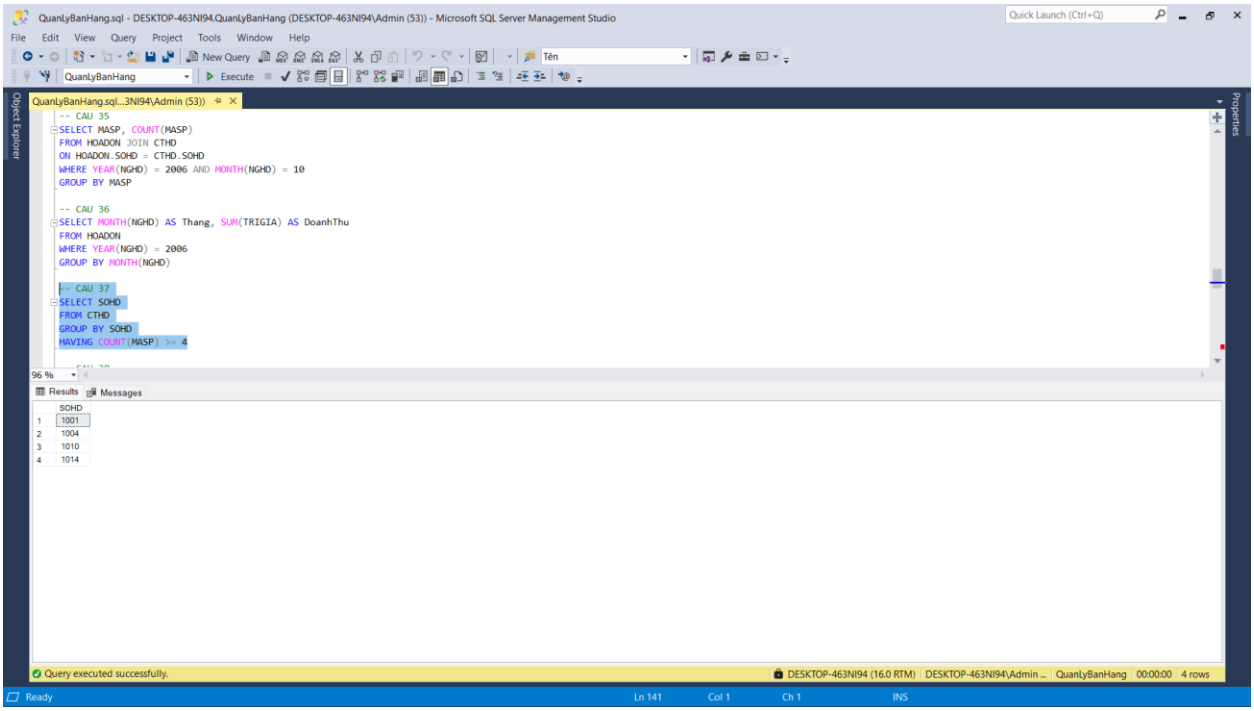
Câu 35:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
-- CAU 33
SELECT NUOCSX, MAX(GIA) AS GiaCaoNhat, MIN(GIA) AS GiaThapNhat, AVG(GIA) AS TrungBinh
FROM SANPHAM
GROUP BY NUOCSX
-- CAU 34
SELECT NGHD, SUM(TRIGIA) AS DoanhThuMoiNgay
FROM HOADON
GROUP BY NGHD
-- CAU 35
SELECT MASP, COUNT(MASP)
FROM HOADON JOIN CTHD
ON HOADON.SOHD = CTHD.SOHD
WHERE YEAR(NGHD) = 2006 AND MONTH(NGHD) = 10
GROUP BY MASP
-- CAU 36
SELECT MONTH(NGHD) AS Thang, SUM(TRIGIA) AS DoanhThu
Results Messages
MASP (No column name)
1 BT01 1
2 BT02 1
3 BT03 1
4 BT04 1
5 BT05 1
6 TV05 1
7 TV06 1
8 TV07 1
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 8 rows
Ready Ln 129 Col 1 Ch 1 INS

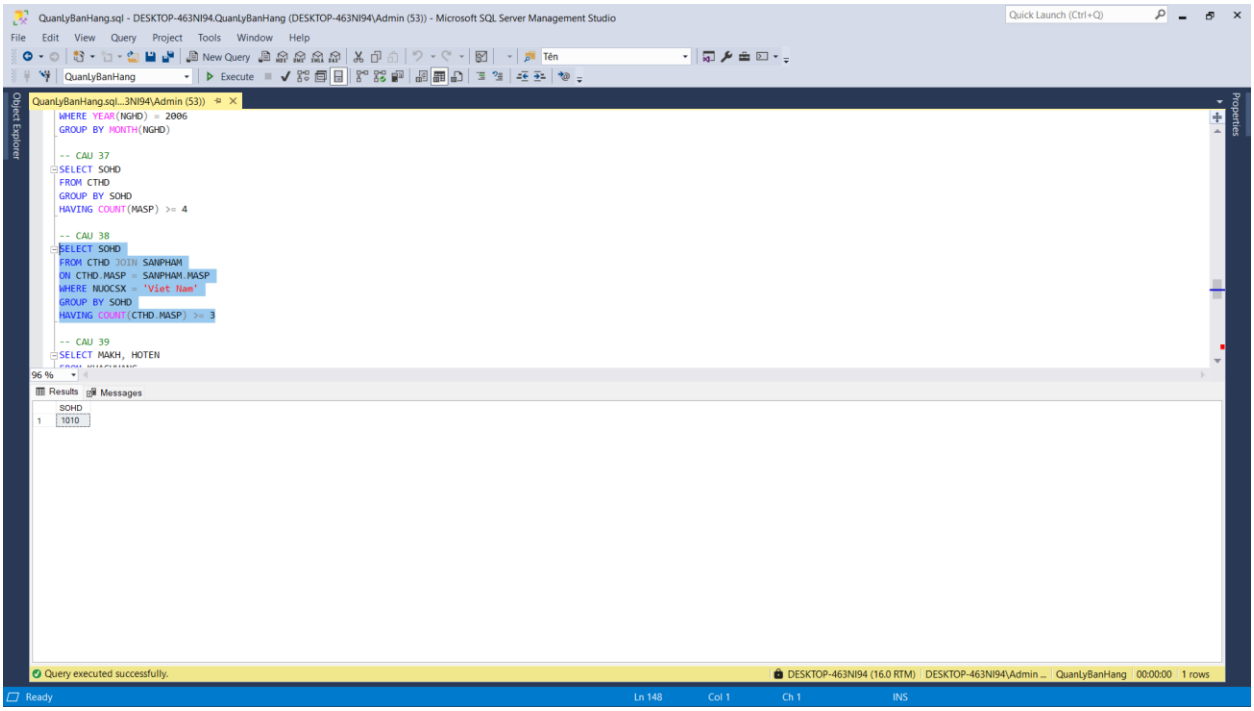
Câu 36:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 34
SELECT NGHD, SUM(TRIGIA) AS DoanhThuMoiNgay
FROM HOADON
GROUP BY NGHD
-- CAU 35
SELECT MASP, COUNT(MASP)
FROM HOADON JOIN CTHD
ON HOADON.SOHD = CTHD.SOHD
WHERE YEAR(NGHD) = 2006 AND MONTH(NGHD) = 10
GROUP BY MASP
-- CAU 36
SELECT MONTH(NGHD) AS Thang, SUM(TRIGIA) AS DoanhThu
FROM HOADON
WHERE YEAR(NGHD) = 2006
GROUP BY MONTH(NGHD)
-- CAU 37
Thang DoanhThu
1 7 320000.00
2 8 940000.00
3 9 180000.00
4 10 7380000.00
5 11 5471000.00
6 12 3155000.00
Query executed successfully.
Ready

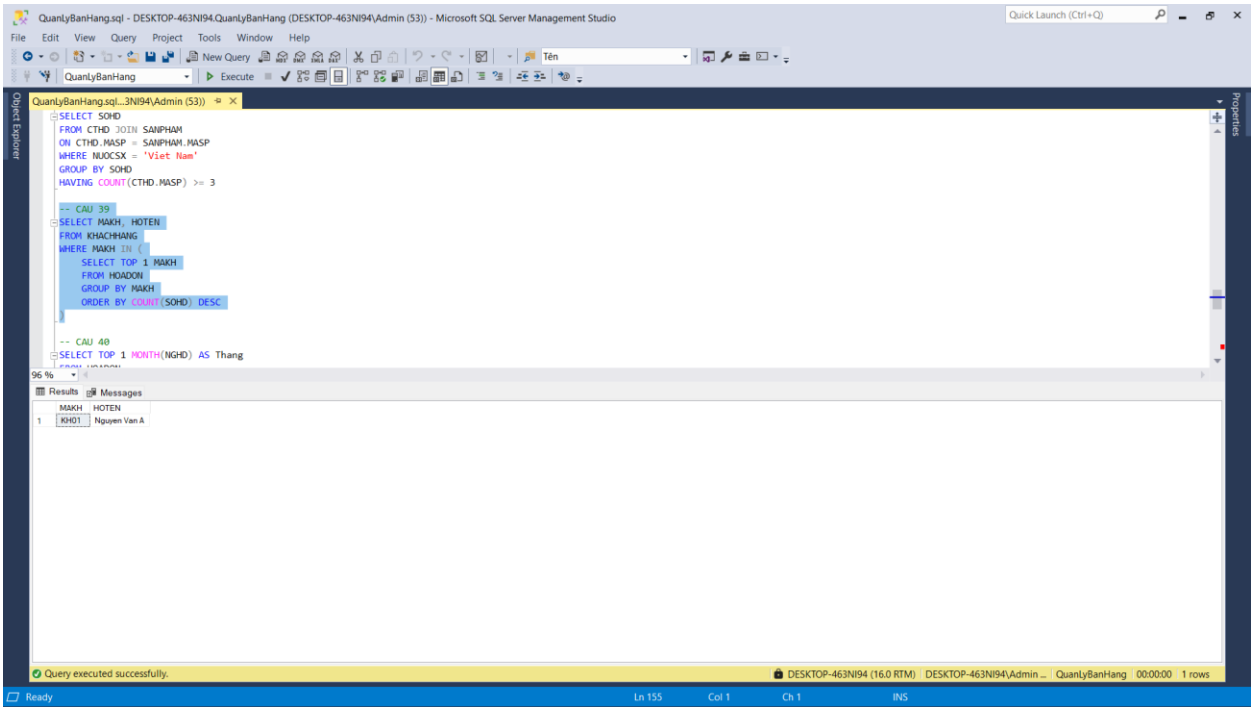
Câu 37:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 35
SELECT MASP, COUNT(MASP)
FROM HOADON JOIN CTHD
ON HOADON.SOHD = CTHD.SOHD
WHERE YEAR(NGHD) = 2006 AND MONTH(NGHD) = 10
GROUP BY MASP
-- CAU 36
SELECT MONTH(NGHD) AS Thang, SUM(TRIGIA) AS DoanhThu
FROM HOADON
WHERE YEAR(NGHD) = 2006
GROUP BY MONTH(NGHD)
-- CAU 37
SELECT SOHD
FROM CTHD
GROUP BY SOHD
HAVING COUNT(MASP) >= 4
SOHD
1 1001
2 1004
3 1010
4 1014
Query executed successfully.
Ready

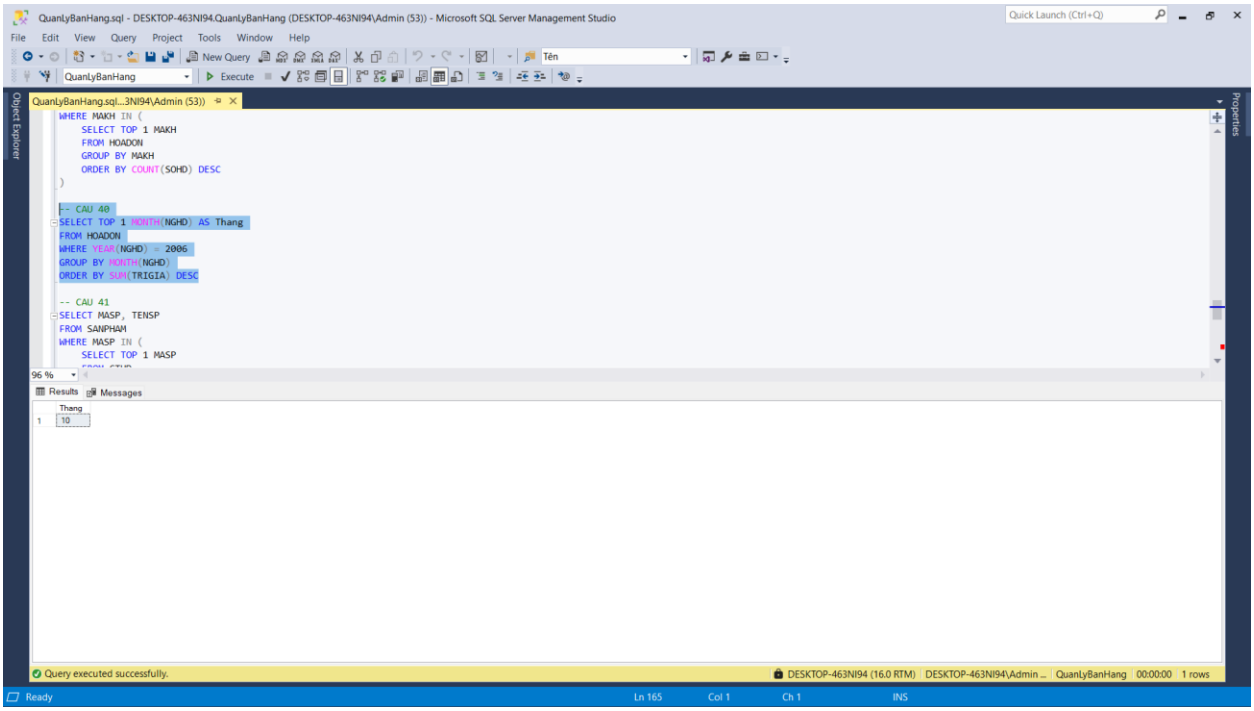
Câu 38:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
WHERE YEAR(NGHD) = 2006
GROUP BY MONTH(NGHD)
-- CAU 37
SELECT SOHD
FROM CTHD
GROUP BY SOHD
HAVING COUNT(MASP) >= 4
-- CAU 38
SELECT SOHD
FROM CTHD JOIN SANPHAM
ON CTHD.MASP = SANPHAM.MASP
WHERE NUOCSX = 'Viet Nam'
GROUP BY SOHD
HAVING COUNT(CTHD.MASP) >= 3
-- CAU 39
SELECT MAKH, HOTEN
96 %
Results
Messages
SOHD
1
1010
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
QuanLyBanHang
00:00:00
1 rows
Ready
Ln 148
Col 1
Ch 1
INS

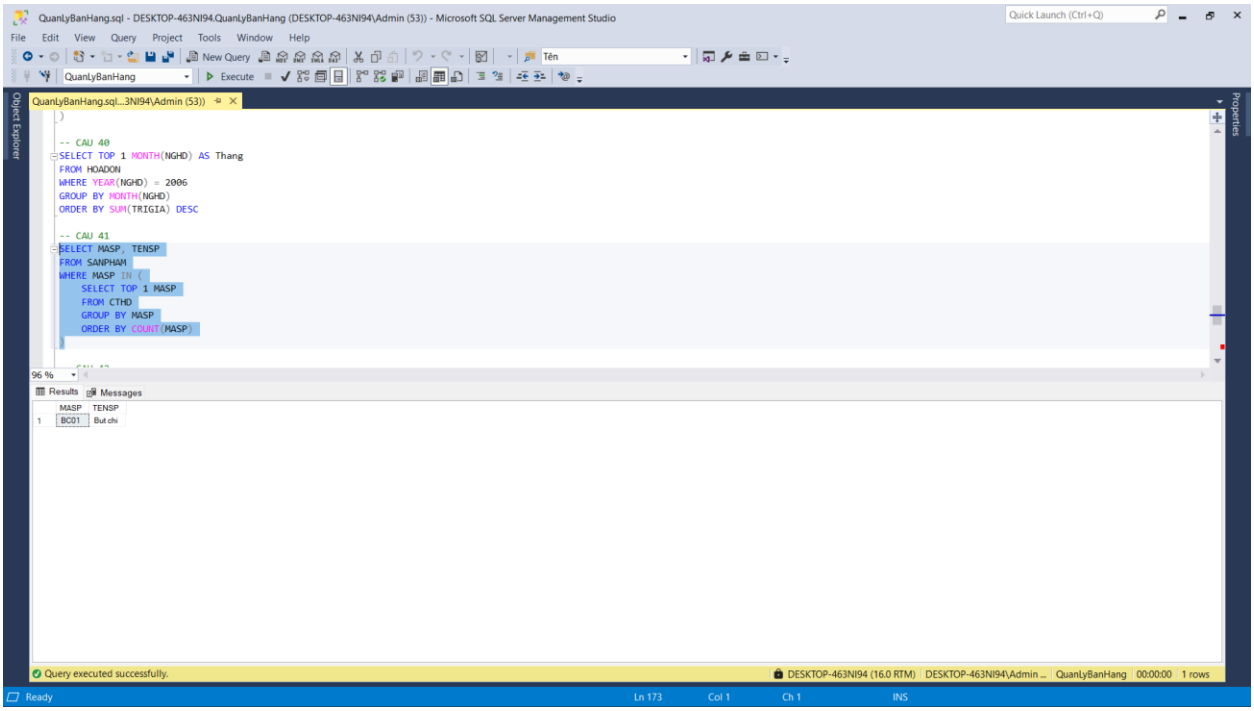
Câu 39:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyBanHang.sql...3NI94\Admin (53))
SELECT SOHD
FROM CTHD JOIN SANPHAM
ON CTHD.MASP = SANPHAM.MASP
WHERE NUOCSX = 'Viet Nam'
GROUP BY SOHD
HAVING COUNT(CTHD.MASP) >= 3
-- CAU 39
SELECT MAKH, HOTEN
FROM KHACHHANG
WHERE MAKH IN (
SELECT TOP 1 MAKH
FROM HOADON
GROUP BY MAKH
ORDER BY COUNT(SOHD) DESC
)
-- CAU 40
SELECT TOP 1 MONTH(NGHD) AS Thang
96 %
Results
Messages
MAKH
HOTEN
1
KH01
Nguyen Van A
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
QuanLyBanHang
00:00:00
1 rows
Ready
Ln 155
Col 1
Ch 1
INS

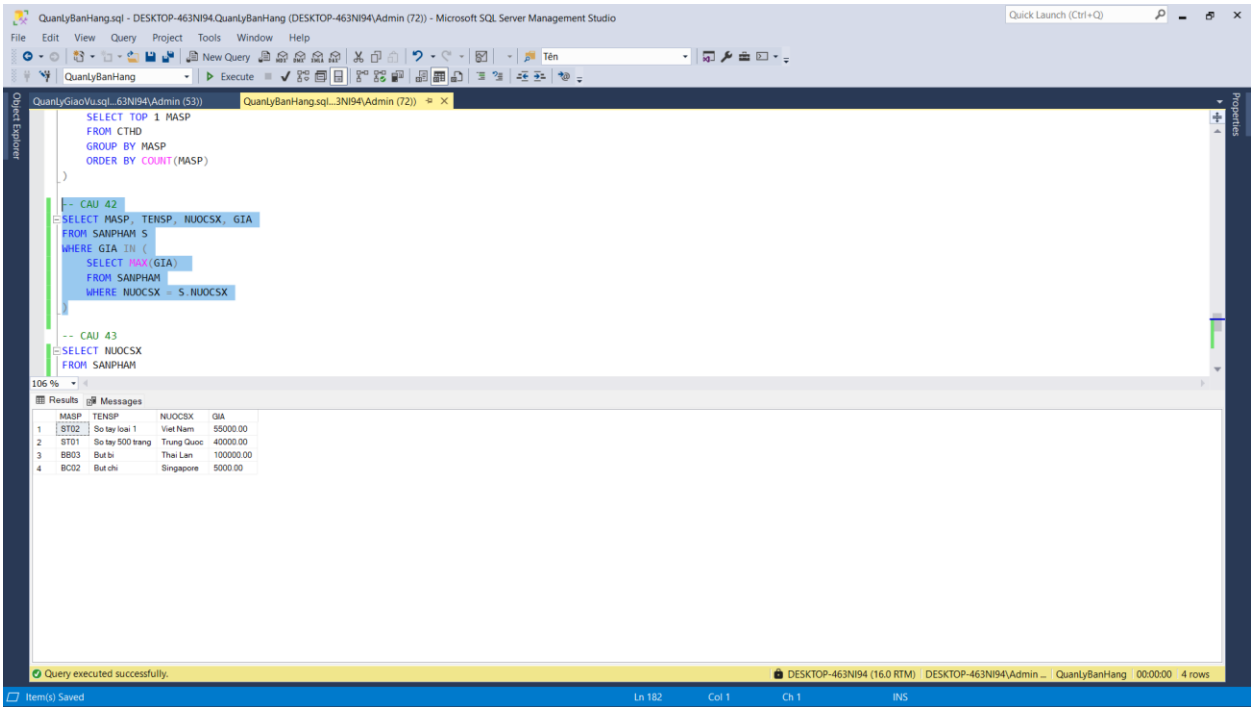
Câu 40:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
WHERE MAKH IN (
SELECT TOP 1 MAKH
FROM HOADON
GROUP BY MAKH
ORDER BY COUNT(SOHD) DESC
)
-- CAU 40
SELECT TOP 1 MONTH(NGHD) AS Thang
FROM HOADON
WHERE YEAR(NGHD) = 2006
GROUP BY MONTH(NGHD)
ORDER BY SUM(TRIGIA) DESC
-- CAU 41
SELECT MASP, TENSP
FROM SANPHAM
WHERE MASP IN (
SELECT TOP 1 MASP
Results
Messages
Thang
1
10
Query executed successfully.
Ready
Ln 165
Col 1
Ch 1
INS

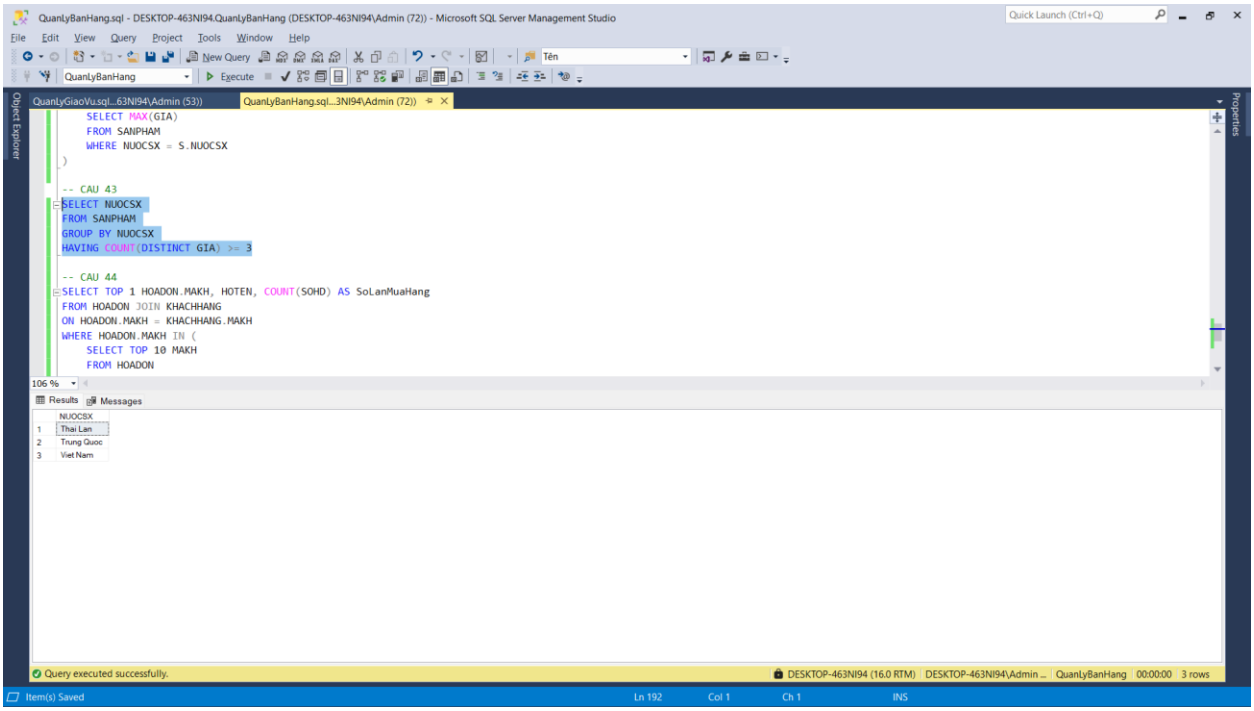
Câu 41:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
)
-- CAU 40
SELECT TOP 1 MONTH(NGHD) AS Thang
FROM HOADON
WHERE YEAR(NGHD) = 2006
GROUP BY MONTH(NGHD)
ORDER BY SUM(TRIGIA) DESC
-- CAU 41
SELECT MASP, TENSP
FROM SANPHAM
WHERE MASP IN (
SELECT TOP 1 MASP
FROM CTHD
GROUP BY MASP
ORDER BY COUNT(MASP)
)
Results
Messages
MASP
TENSP
1
BC01
Query executed successfully.
Ready
Ln 173
Col 1
Ch 1
INS

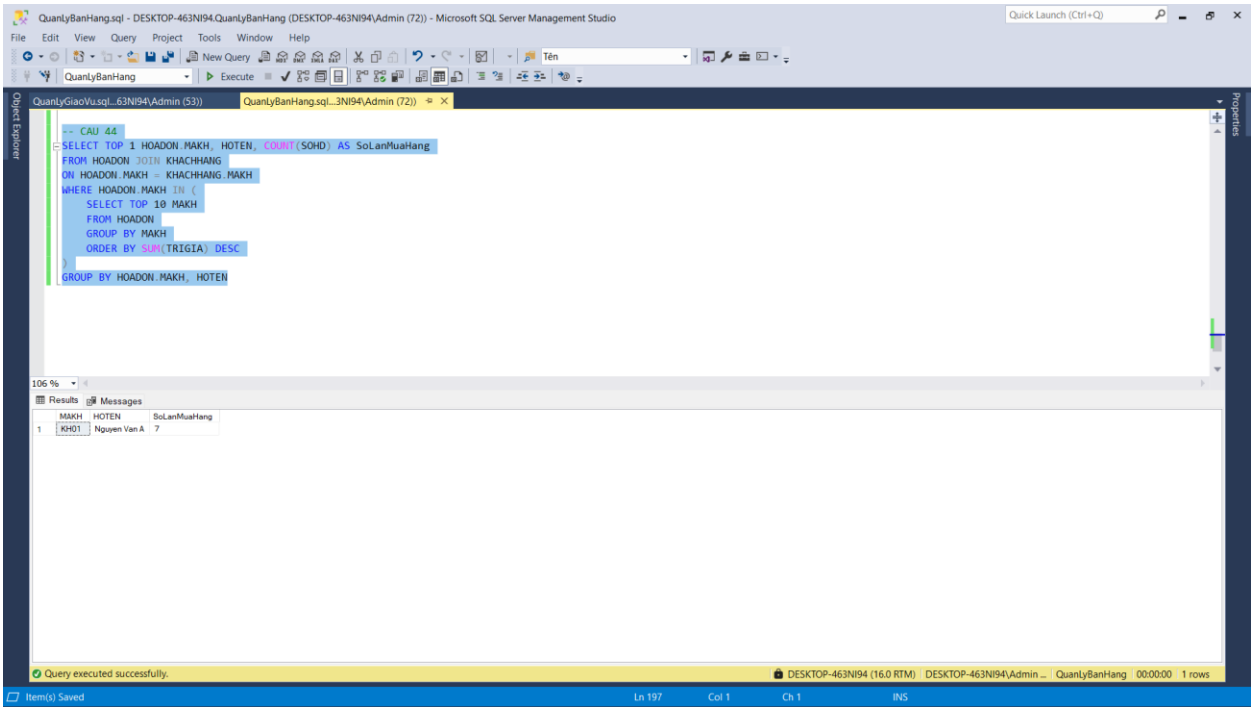
Câu 42:


QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (72)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyGiaoVu.sql...63NI94\Admin (53))
QuanLyBanHang.sql...3NI94\Admin (72))
SELECT TOP 1 MASP
FROM CTHD
GROUP BY MASP
ORDER BY COUNT(MASP)
)
-- CAU 42
SELECT MASP, TENSP, NUOCSX, GIA
FROM SANPHAM S
WHERE GIA IN (
SELECT MAX(GIA)
FROM SANPHAM
WHERE NUOCSX = S.NUOCSX
)
-- CAU 43
SELECT NUOCSX
FROM SANPHAM
106 %
Results
Messages
MASP TENSP NUOCSX GIA
1 ST02 So tay loai 1 Viet Nam 55000.00
2 ST01 So tay 500 trang Trung Quoc 40000.00
3 BB03 But bi Thai Lan 100000.00
4 BC02 But chi Singapore 5000.00
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 4 rows
Item(s) Saved
Ln 182 Col 1 Ch 1 INS

Câu 43:

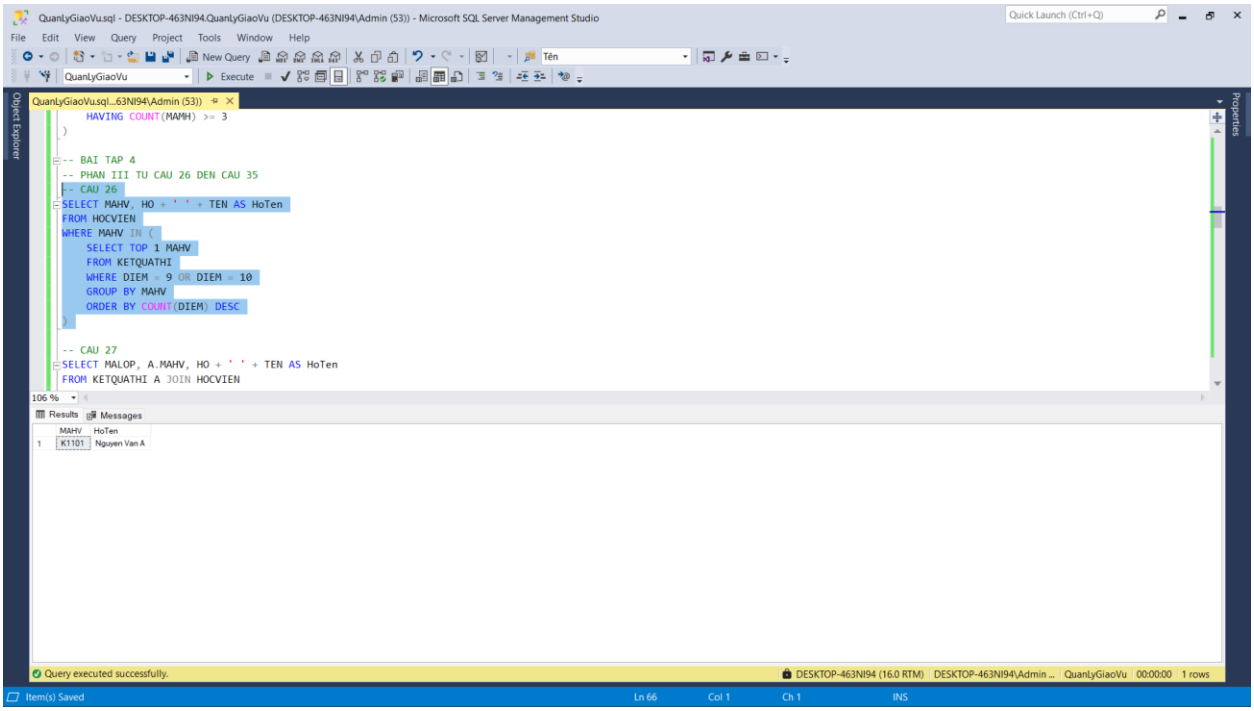

QuanLyBanHang.sql - DESKTOP-463NI94.QuanLyBanHang (DESKTOP-463NI94\Admin (72)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
QuanLyBanHang
QuanLyGiaoVu.sql...63NI94\Admin (53))
QuanLyBanHang.sql...3NI94\Admin (72))
SELECT MAX(GIA)
FROM SANPHAM
WHERE NUOCSX = S.NUOCSX
)
-- CAU 43
SELECT NUOCSX
FROM SANPHAM
GROUP BY NUOCSX
HAVING COUNT(DISTINCT GIA) >= 3
-- CAU 44
SELECT TOP 1 HOADON.MAKH, HOTEN, COUNT(SOHD) AS SoLanMuaHang
FROM HOADON JOIN KHACHHANG
ON HOADON.MAKH = KHACHHANG.MAKH
WHERE HOADON.MAKH IN (
SELECT TOP 10 MAKH
FROM HOADON
106 %
Results
Messages
NUOCSX
1 Thai Lan
2 Trung Quoc
3 Viet Nam
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyBanHang 00:00:00 3 rows
Item(s) Saved
Ln 192 Col 1 Ch 1 INS

Câu 44:

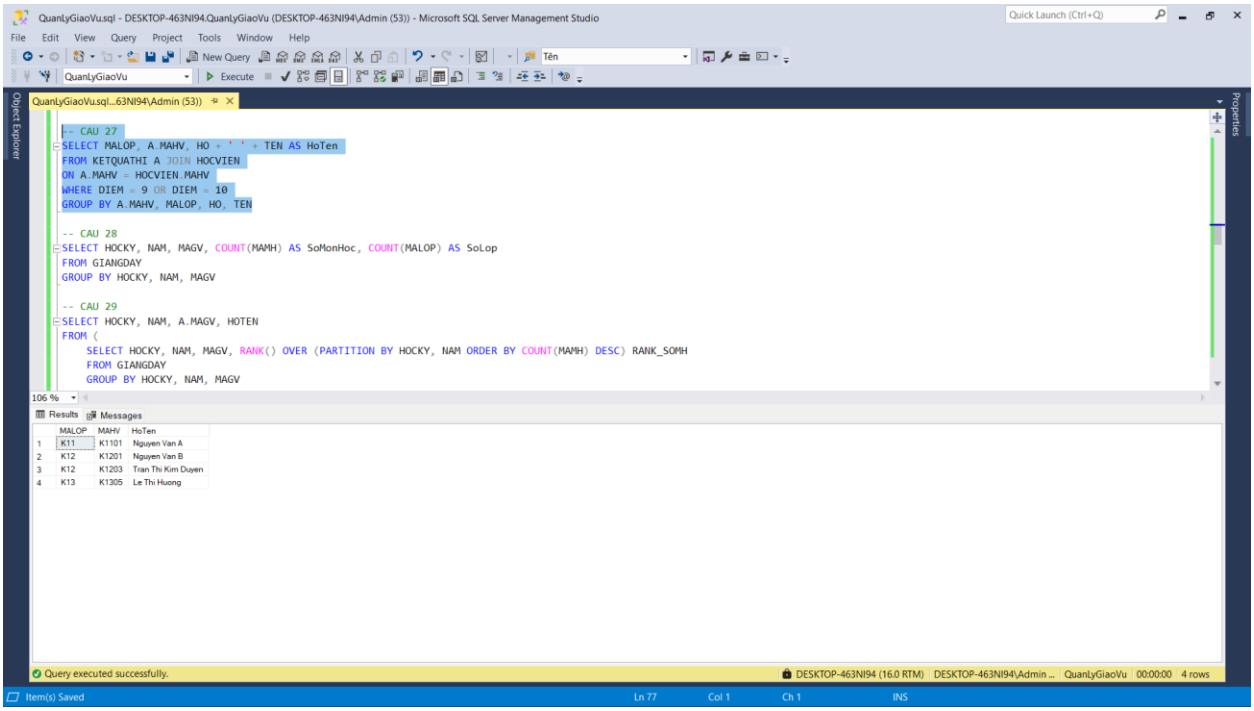


Bài tập 4:

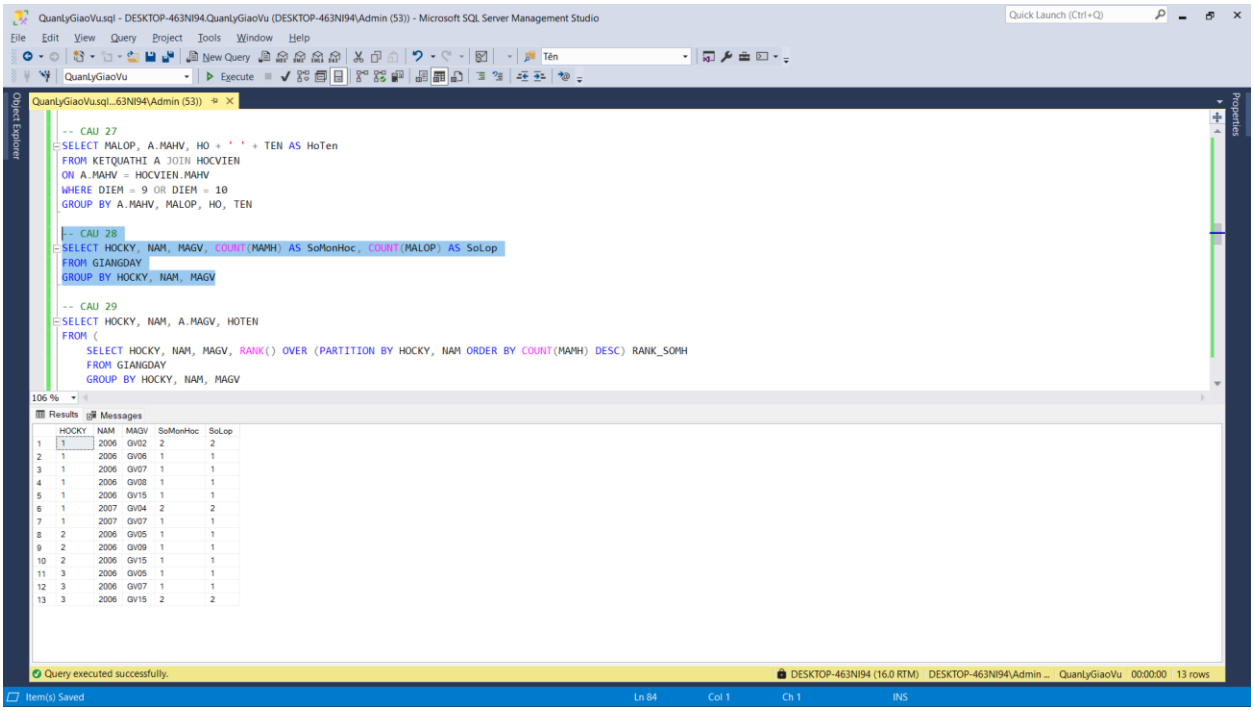
Câu 26:



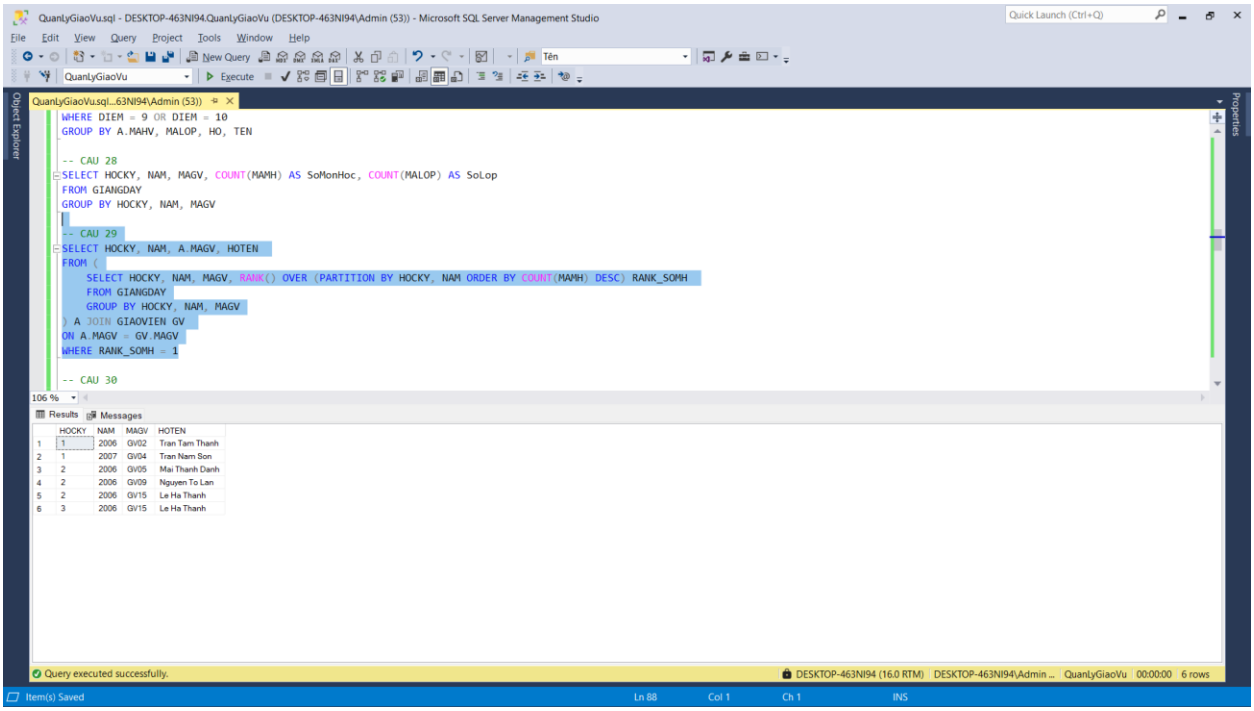
Câu 27:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 27
SELECT MALOP, A.MAHV, HO + ' ' + TEN AS HoTen
FROM KETQUATHI A JOIN HOCVIEN
ON A.MAHV = HOCVIEN.MAHV
WHERE DIEM = 9 OR DIEM = 10
GROUP BY A.MAHV, MALOP, HO, TEN
-- CAU 28
SELECT HOCKY, NAM, MAGV, COUNT(MAMH) AS SoMonHoc, COUNT(MALOP) AS SoLop
FROM GIANGDAY
GROUP BY HOCKY, NAM, MAGV
-- CAU 29
SELECT HOCKY, NAM, A.MAGV, HOTEN
FROM (
SELECT HOCKY, NAM, MAGV, RANK() OVER (PARTITION BY HOCKY, NAM ORDER BY COUNT(MAMH) DESC) RANK_SOMH
FROM GIANGDAY
GROUP BY HOCKY, NAM, MAGV
Results
Messages
MALOP MAHV HoTen
1 K11 K1101 Nguyen Van A
2 K12 K1201 Nguyen Van B
3 K12 K1203 Tran Thi Kim Duyen
4 K13 K1305 Le Thi Huong
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyGiaoVu 00:00:00 4 rows
Item(s) Saved
Ln 77 Col 1 Ch 1 INS

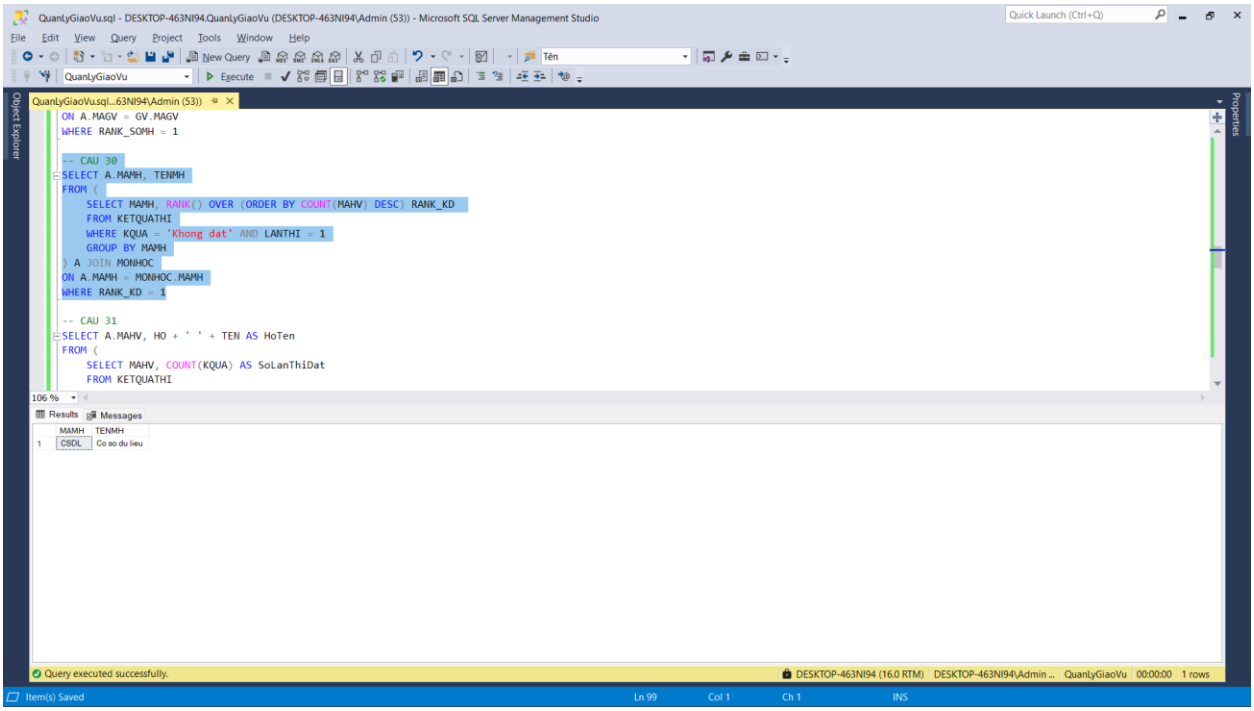
Câu 28:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 27
SELECT MALOP, A.MAHV, HO + ' ' + TEN AS HoTen
FROM KETQUATHI A JOIN HOCVIEN
ON A.MAHV = HOCVIEN.MAHV
WHERE DIEM = 9 OR DIEM = 10
GROUP BY A.MAHV, MALOP, HO, TEN
-- CAU 28
SELECT HOCKY, NAM, MAGV, COUNT(MAMH) AS SoMonHoc, COUNT(MALOP) AS SoLop
FROM GIANGDAY
GROUP BY HOCKY, NAM, MAGV
-- CAU 29
SELECT HOCKY, NAM, A.MAGV, HOTEN
FROM (
SELECT HOCKY, NAM, MAGV, RANK() OVER (PARTITION BY HOCKY, NAM ORDER BY COUNT(MAMH) DESC) RANK_SOMH
FROM GIANGDAY
GROUP BY HOCKY, NAM, MAGV
Results
Messages
HOCKY NAM MAGV SoMonHoc SoLop
1 1 2006 GV02 2 2
2 1 2006 GV06 1 1
3 1 2006 GV07 1 1
4 1 2006 GV08 1 1
5 1 2006 GV15 1 1
6 1 2007 GV04 2 2
7 1 2007 GV07 1 1
8 2 2006 GV05 1 1
9 2 2006 GV09 1 1
10 2 2006 GV15 1 1
11 3 2006 GV05 1 1
12 3 2006 GV07 1 1
13 3 2006 GV15 2 2
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyGiaoVu 00:00:00 13 rows
Item(s) Saved
Ln 84 Col 1 Ch 1 INS

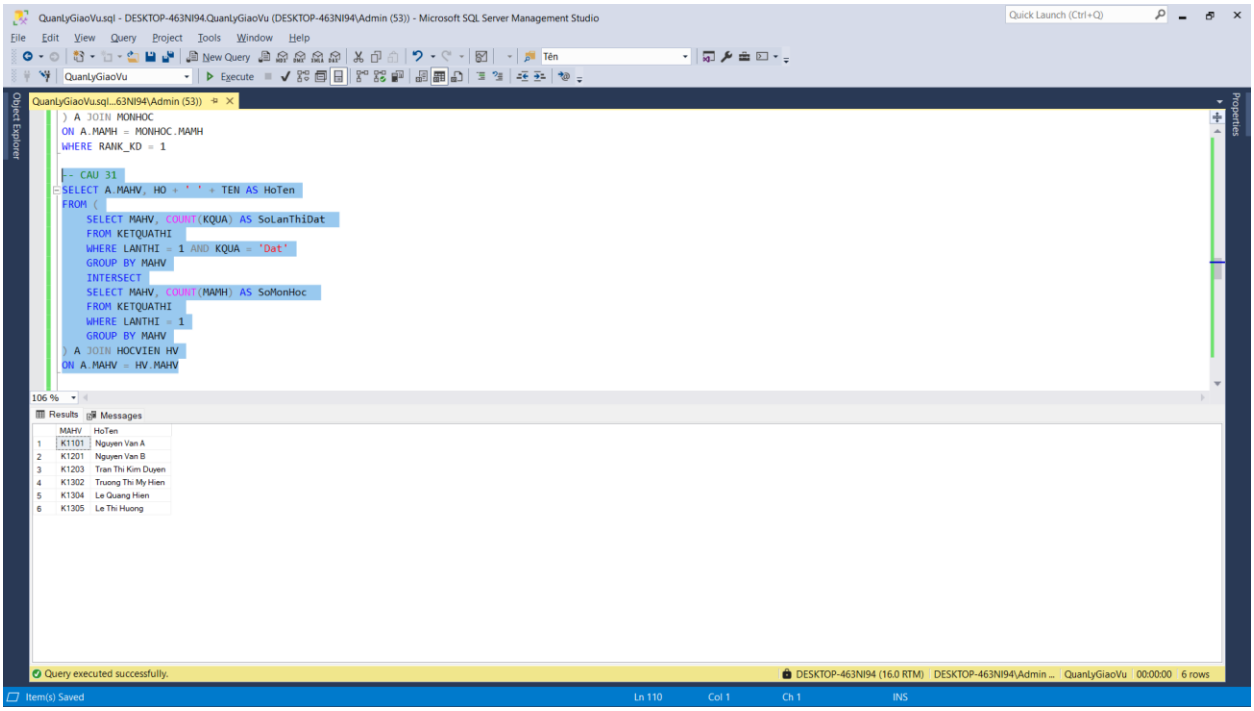
Câu 29:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
WHERE DIEM = 9 OR DIEM = 10
GROUP BY A.MAHV, MALOP, HO, TEN
-- CAU 28
SELECT HOCKY, NAM, MAGV, COUNT(MAMH) AS SoMonHoc, COUNT(MALOP) AS SoLop
FROM GIANGDAY
GROUP BY HOCKY, NAM, MAGV
-- CAU 29
SELECT HOCKY, NAM, A.MAGV, HOTEN
FROM (
SELECT HOCKY, NAM, MAGV, RANK() OVER (PARTITION BY HOCKY, NAM ORDER BY COUNT(MAMH) DESC) RANK_SOMH
FROM GIANGDAY
GROUP BY HOCKY, NAM, MAGV
) A JOIN GIAOVIEN GV
ON A.MAGV = GV.MAGV
WHERE RANK_SOMH = 1
-- CAU 30
Results
Messages
HOCKY NAM MAGV HOTEN
1 1 2006 GV02 Tran Tam Thanh
2 1 2007 GV04 Tran Nam Son
3 2 2006 GV05 Mai Thanh Danh
4 2 2006 GV09 Nguyen To Lan
5 2 2006 GV15 Le Ha Thanh
6 3 2006 GV15 Le Ha Thanh
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyGiaoVu 00:00:00 6 rows
Item(s) Saved
Ln 88 Col 1 Ch 1 INS

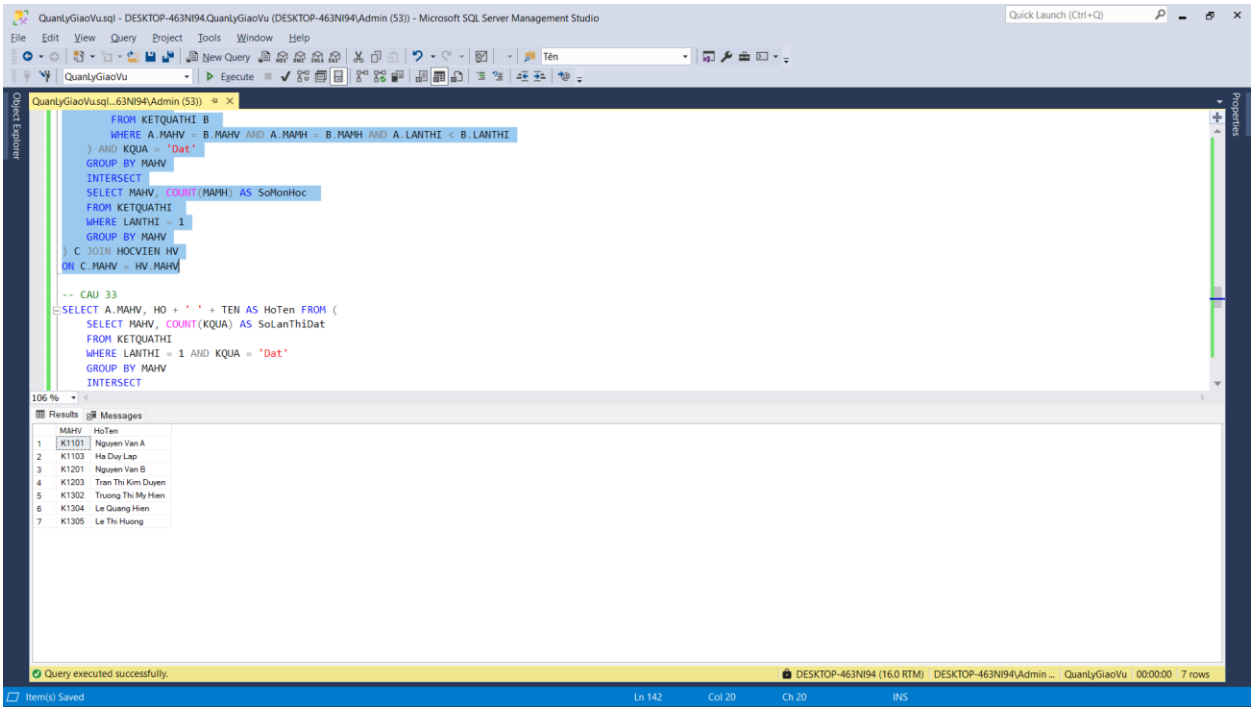
Câu 30:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
ON A.MAGV = GV.MAGV
WHERE RANK_SOMH = 1
-- CAU 30
SELECT A.MAMH, TENMH
FROM (
SELECT MAMH, RANK() OVER (ORDER BY COUNT(MAHV) DESC) RANK_KD
FROM KETQUATHI
WHERE KQUA = 'Khong dat' AND LANTHI = 1
GROUP BY MAMH
) A JOIN MONHOC
ON A.MAMH = MONHOC.MAMH
WHERE RANK_KD = 1
-- CAU 31
SELECT A.MAHV, HO + ' ' + TEN AS HoTen
FROM (
SELECT MAHV, COUNT(KQUA) AS SoLanThiDat
FROM KETQUATHI
Results
Messages
MAMH TENMH
1 CSDL Co so du lieu
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... QuanLyGiaoVu 00:00:00 1 rows
Item(s) Saved
Ln 99 Col 1 Ch 1 INS

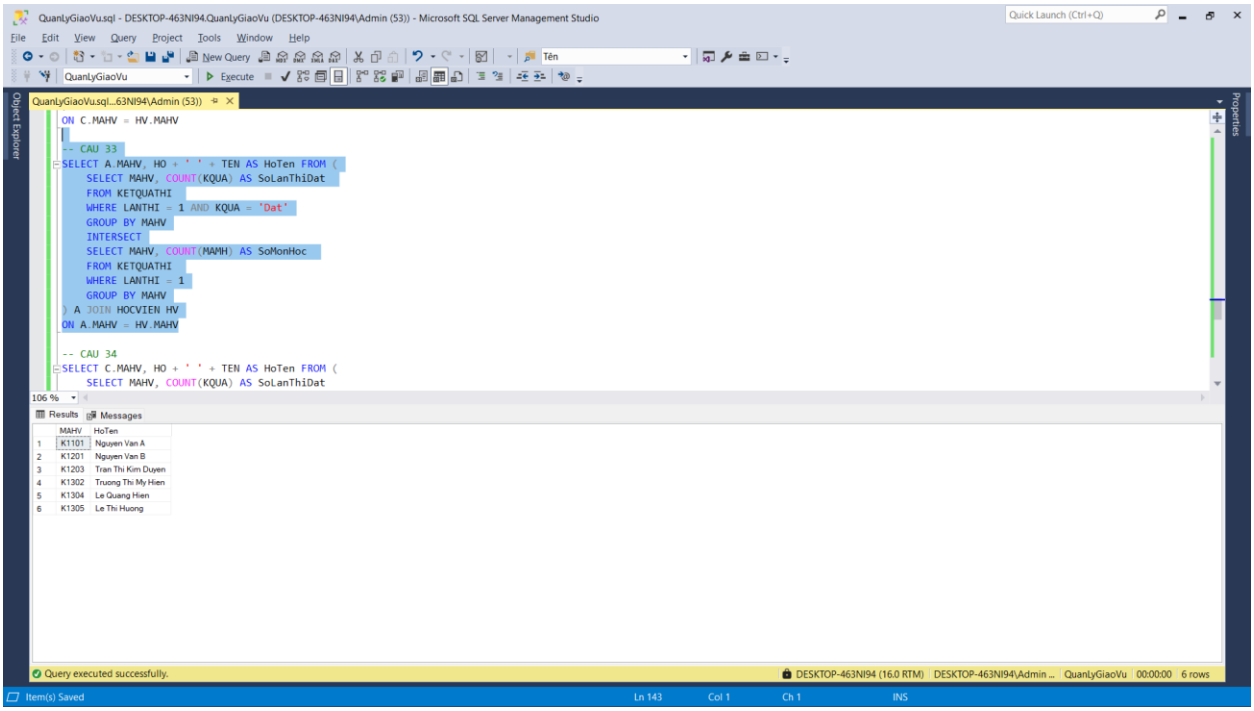
Câu 31:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
) A JOIN MONHOC
ON A.MAMH = MONHOC.MAMH
WHERE RANK_KD = 1
-- CAU 31
SELECT A.MAHV, HO + ' ' + TEN AS HoTen
FROM (
SELECT MAHV, COUNT(KQUA) AS SoLanThiDat
FROM KETQUATHI
WHERE LANTHI = 1 AND KQUA = 'Dat'
GROUP BY MAHV
INTERSECT
SELECT MAHV, COUNT(MAMH) AS SoMonHoc
FROM KETQUATHI
WHERE LANTHI = 1
GROUP BY MAHV
) A JOIN HOCVIEN HV
ON A.MAHV = HV.MAHV
MAHV HoTen
1 K1101 Nguyen Van A
2 K1201 Nguyen Van B
3 K1203 Tran Thi Kim Duyen
4 K1302 Truong Thi My Hien
5 K1304 Le Quang Hien
6 K1305 Le Thi Huong
Query executed successfully.

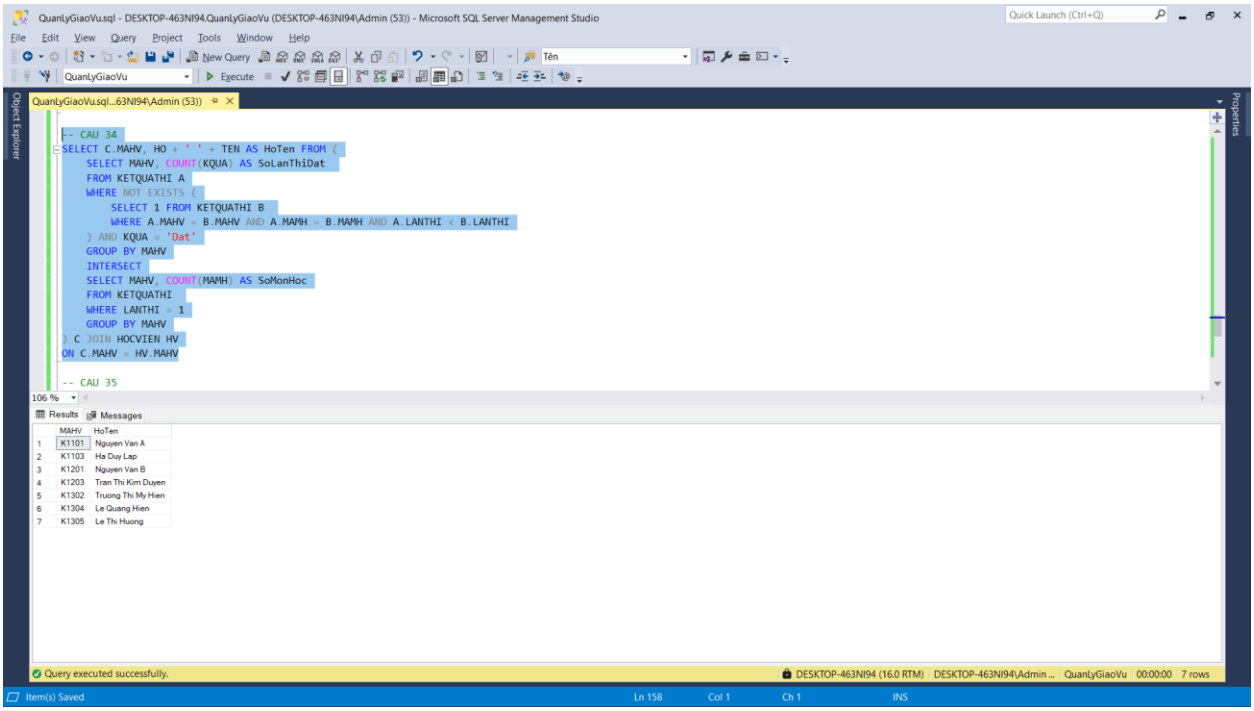
Câu 32:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
FROM KETQUATHI B
WHERE A.MAHV = B.MAHV AND A.MAMH = B.MAMH AND A.LANTHI < B.LANTHI
) AND KQUA = 'Dat'
GROUP BY MAHV
INTERSECT
SELECT MAHV, COUNT(MAMH) AS SoMonHoc
FROM KETQUATHI
WHERE LANTHI = 1
GROUP BY MAHV
) C JOIN HOCVIEN HV
ON C.MAHV = HV.MAHV
-- CAU 33
SELECT A.MAHV, HO + ' ' + TEN AS HoTen FROM (
SELECT MAHV, COUNT(KQUA) AS SoLanThiDat
FROM KETQUATHI
WHERE LANTHI = 1 AND KQUA = 'Dat'
GROUP BY MAHV
INTERSECT
MAHV HoTen
1 K1101 Nguyen Van A
2 K1103 Ha Duy Lap
3 K1201 Nguyen Van B
4 K1203 Tran Thi Kim Duyen
5 K1302 Truong Thi My Hien
6 K1304 Le Quang Hien
7 K1305 Le Thi Huong
Query executed successfully.

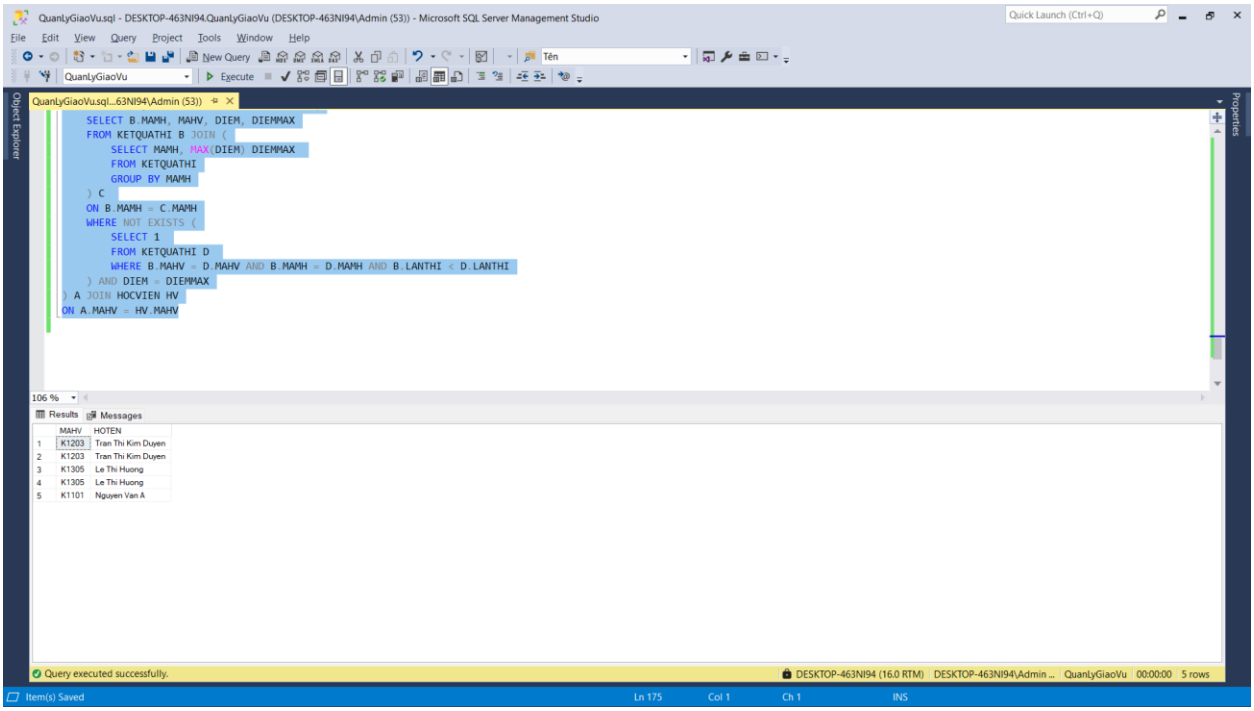
Câu 33:


QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
ON C.MAHV = HV.MAHV
-- CAU 33
SELECT A.MAHV, HO + ' ' + TEN AS HoTen FROM (
SELECT MAHV, COUNT(KQUA) AS SoLanThiDat
FROM KETQUATHI
WHERE LANTHI = 1 AND KQUA = 'Dat'
GROUP BY MAHV
INTERSECT
SELECT MAHV, COUNT(MAMH) AS SoMonHoc
FROM KETQUATHI
WHERE LANTHI = 1
GROUP BY MAHV
) A JOIN HOCVIEN HV
ON A.MAHV = HV.MAHV
-- CAU 34
SELECT C.MAHV, HO + ' ' + TEN AS HoTen FROM (
SELECT MAHV, COUNT(KQUA) AS SoLanThiDat
Results
Messages
MAHV HoTen
K1101 Nguyen Van A
K1201 Nguyen Van B
K1203 Tran Thi Kim Duyen
K1302 Truong Thi My Hien
K1304 Le Quang Hien
K1305 Le Thi Huong
Query executed successfully.
6 rows

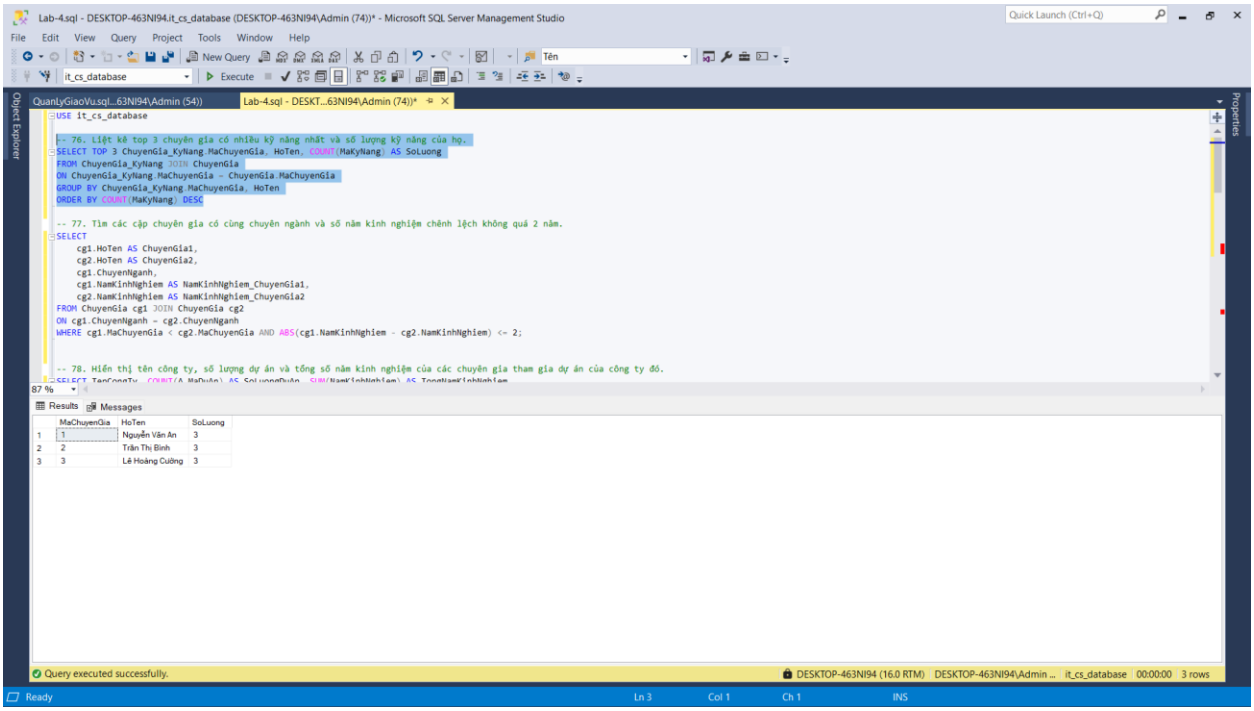
Câu 34:

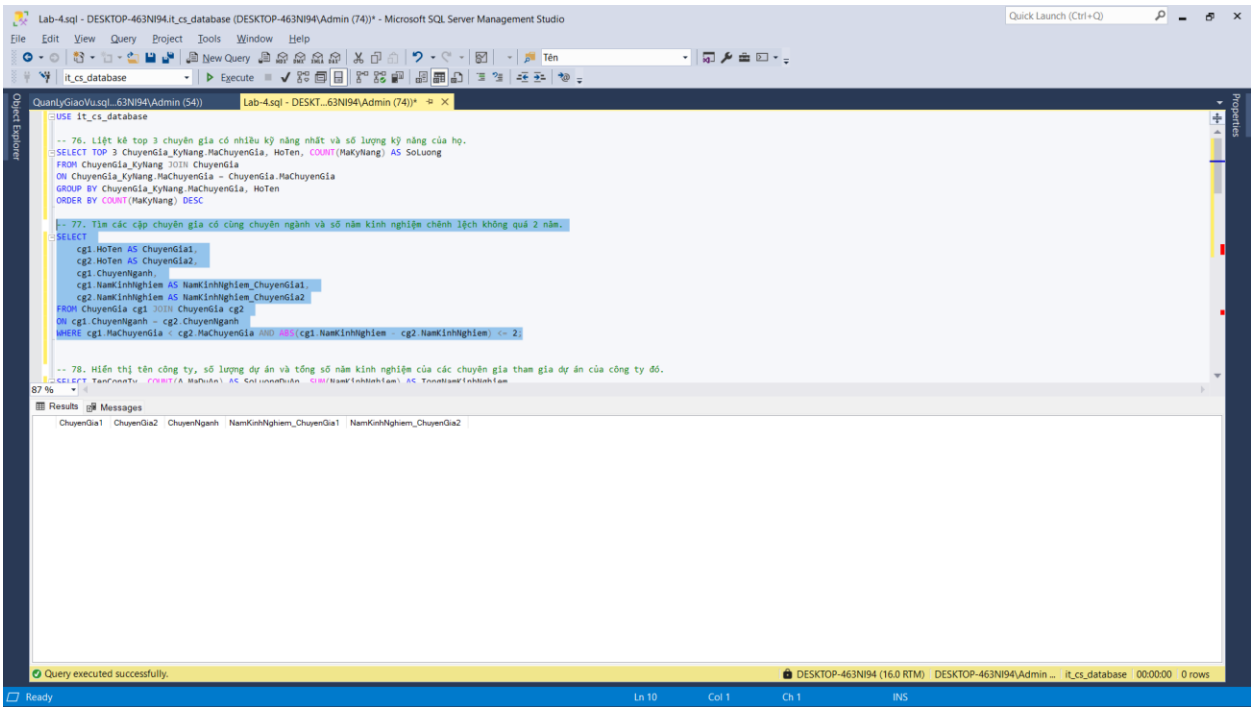

QuanLyGiaoVu.sql - DESKTOP-463NI94.QuanLyGiaoVu (DESKTOP-463NI94\Admin (53)) - Microsoft SQL Server Management Studio
-- CAU 34
SELECT C.MAHV, HO + ' ' + TEN AS HoTen FROM (
SELECT MAHV, COUNT(KQUA) AS SoLanThiDat
FROM KETQUATHI A
WHERE NOT EXISTS (
SELECT 1 FROM KETQUATHI B
WHERE A.MAHV = B.MAHV AND A.MAMH = B.MAMH AND A.LANTHI < B.LANTHI
) AND KQUA = 'Dat'
GROUP BY MAHV
INTERSECT
SELECT MAHV, COUNT(MAMH) AS SoMonHoc
FROM KETQUATHI
WHERE LANTHI = 1
GROUP BY MAHV
) C JOIN HOCVIEN HV
ON C.MAHV = HV.MAHV
-- CAU 35
Results
Messages
MAHV HoTen
K1101 Nguyen Van A
K1103 Ha Duy Lap
K1201 Nguyen Van B
K1203 Tran Thi Kim Duyen
K1302 Truong Thi My Hien
K1304 Le Quang Hien
K1305 Le Thi Huong
Query executed successfully.
7 rows

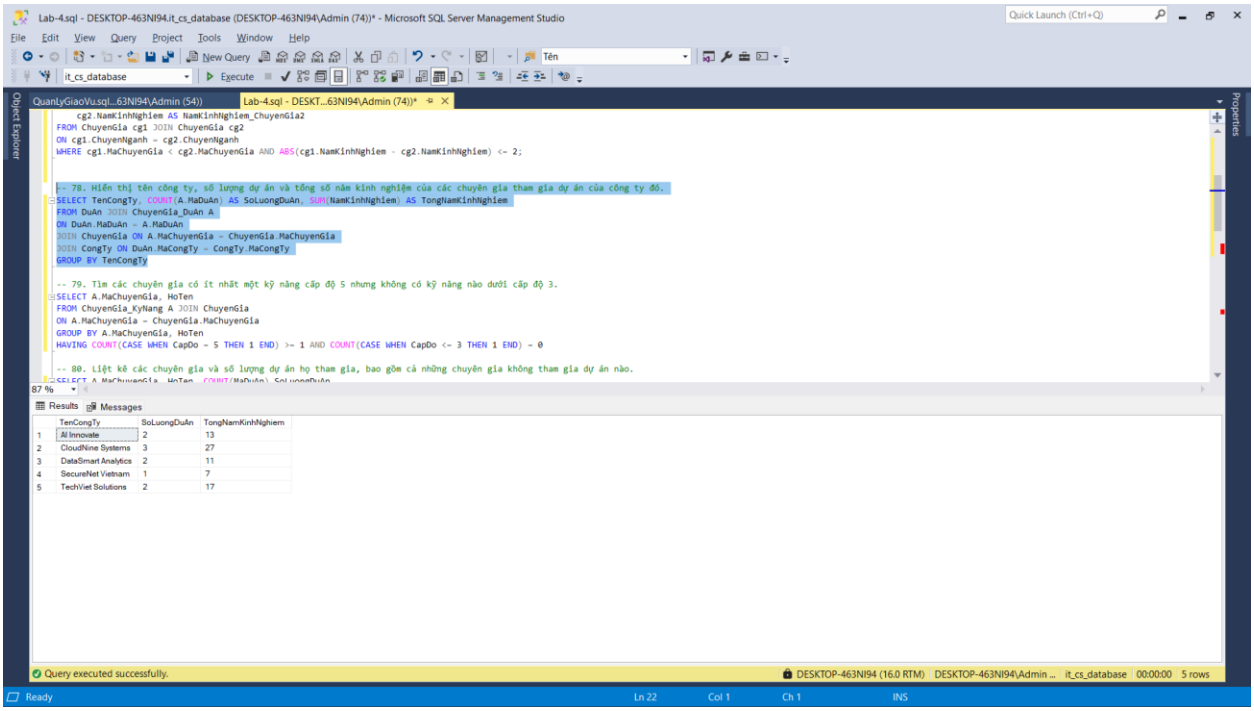
Câu 35:

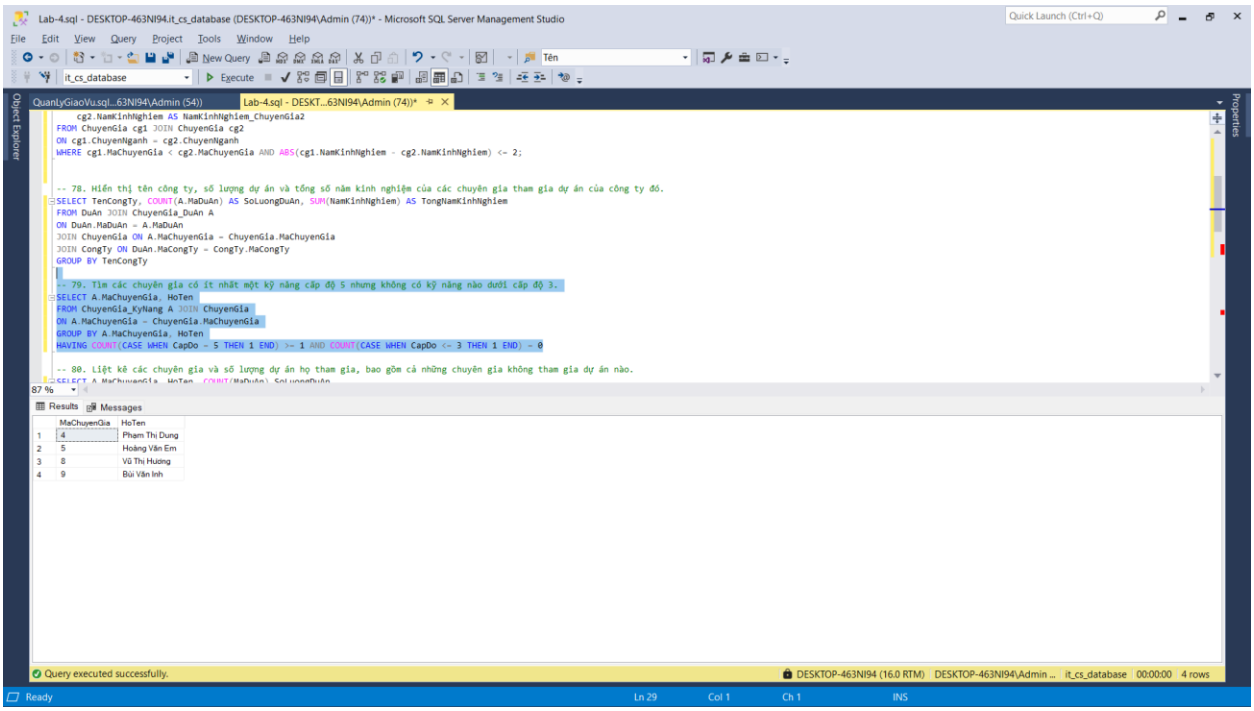


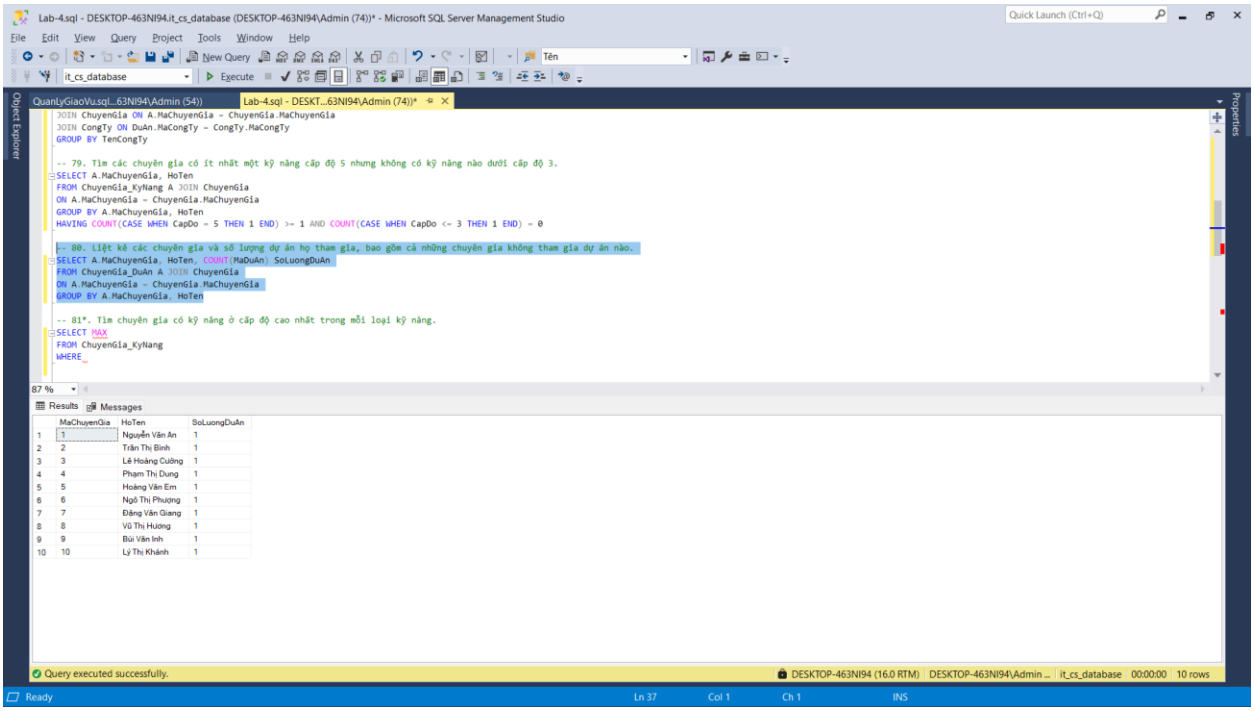
Homework:

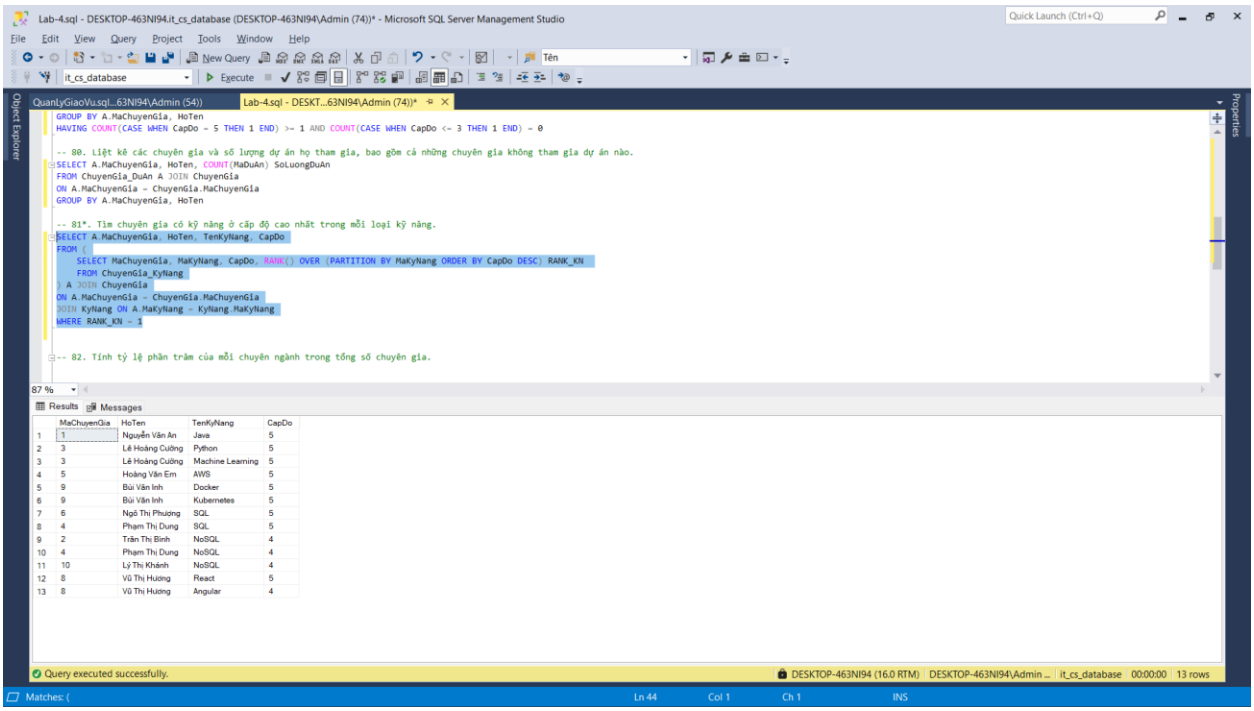


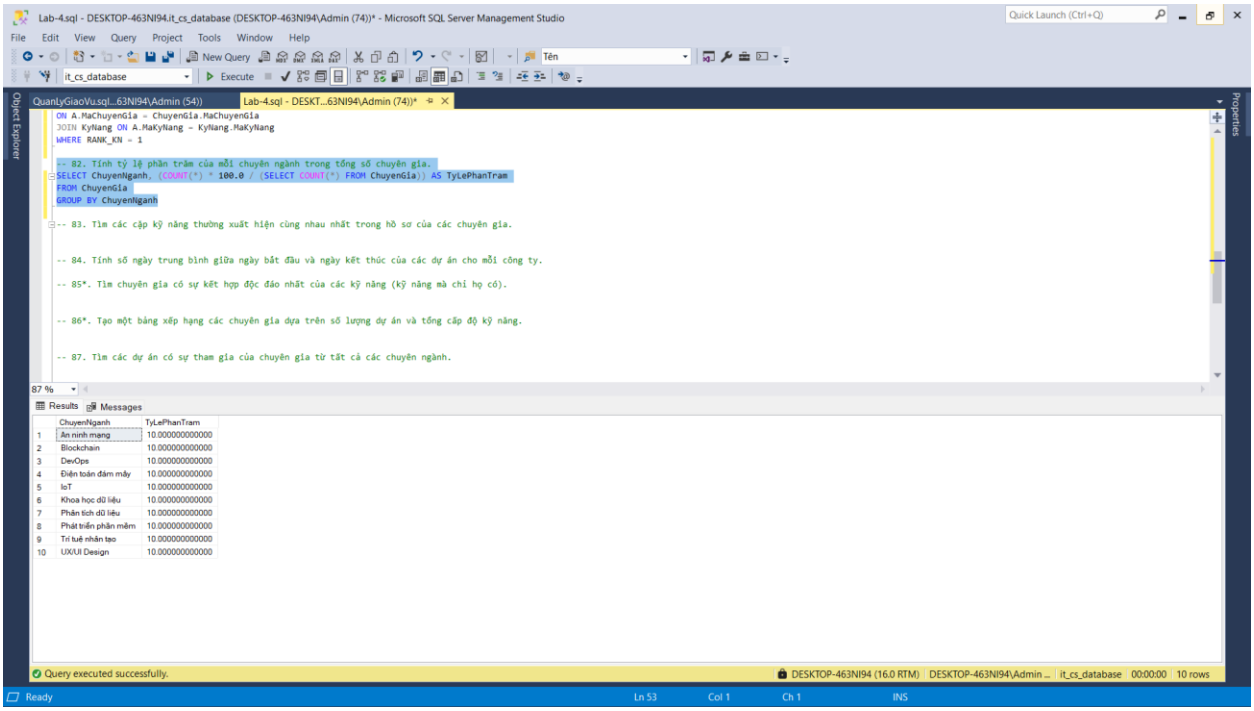

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
USE it_cs_database
-- 76. Liệt kê top 3 chuyên gia có nhiều kỹ năng nhất và số lượng kỹ năng của họ.
SELECT TOP 3 ChuyenGia_KyNang.MaChuyenGia, HoTen, COUNT(MaKyNang) AS SoLuong
FROM ChuyenGia_KyNang JOIN ChuyenGia
ON ChuyenGia_KyNang.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY ChuyenGia_KyNang.MaChuyenGia, HoTen
ORDER BY COUNT(MaKyNang) DESC
-- 77. Tìm các cặp chuyên gia có cùng chuyên ngành và số năm kinh nghiệm chênh lệch không quá 2 năm.
SELECT
cg1.HoTen AS ChuyenGia1,
cg2.HoTen AS ChuyenGia2,
cg1.ChuyenNganh,
cg1.NamKinhNghiem AS NamKinhNghiem_ChuyenGia1,
cg2.NamKinhNghiem AS NamKinhNghiem_ChuyenGia2
FROM ChuyenGia cg1 JOIN ChuyenGia cg2
ON cg1.ChuyenNganh = cg2.ChuyenNganh
WHERE cg1.MaChuyenGia < cg2.MaChuyenGia AND ABS(cg1.NamKinhNghiem - cg2.NamKinhNghiem) <= 2;
-- 78. Hiển thị tên công ty, số lượng dự án và tổng số năm kinh nghiệm của các chuyên gia tham gia dự án của công ty đó.
87 %
Results
Messages
ChuyenGia1
ChuyenGia2
ChuyenNganh
NamKinhNghiem_ChuyenGia1
NamKinhNghiem_ChuyenGia2
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
it_cs_database
00:00:00
0 rows
Ready
Ln 10
Col 1
Ch 1
INS

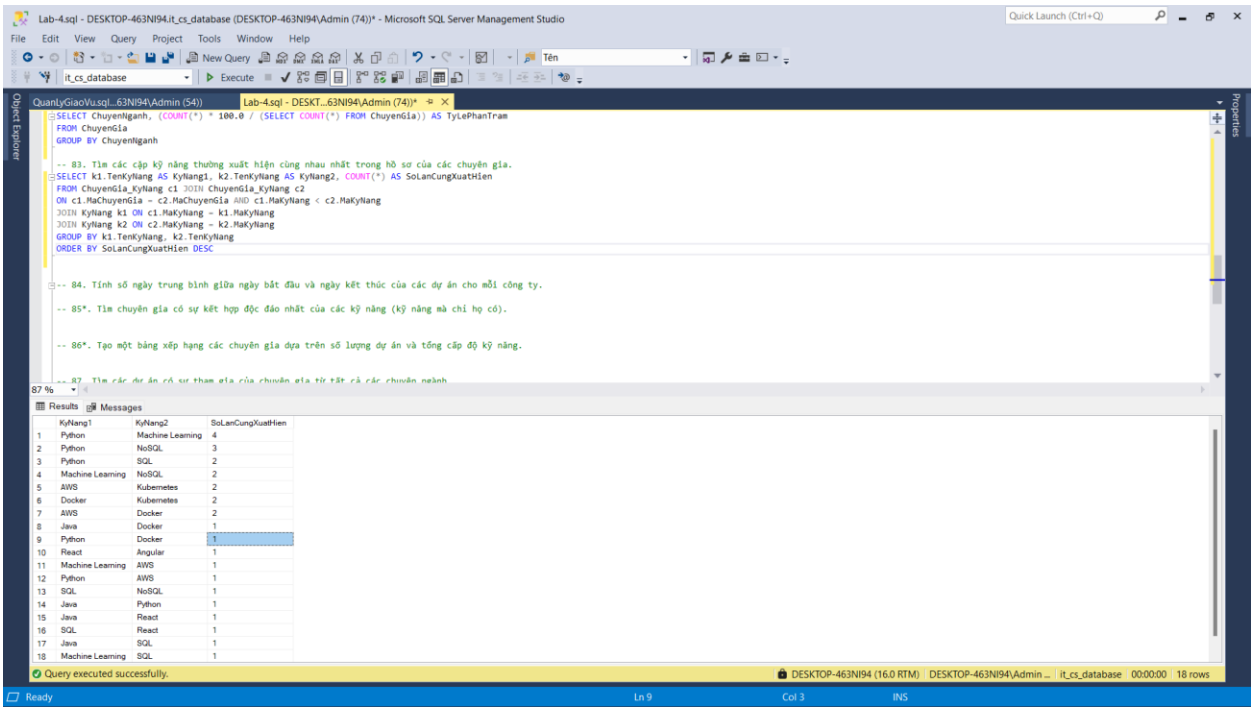

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
cg2.NamKinhNghiem AS NamKinhNghiem_ChuyenGia2
FROM ChuyenGia cg1 JOIN ChuyenGia cg2
ON cg1.ChuyenNganh = cg2.ChuyenNganh
WHERE cg1.MaChuyenGia < cg2.MaChuyenGia AND ABS(cg1.NamKinhNghiem - cg2.NamKinhNghiem) <= 2;
-- 78. Hiển thị tên công ty, số lượng dự án và tổng số năm kinh nghiệm của các chuyên gia tham gia dự án của công ty đó.
SELECT TenCongTy, COUNT(A.MaDuAn) AS SoLuongDuAn, SUM(NamKinhNghiem) AS TongNamKinhNghiem
FROM DuAn JOIN ChuyenGia_DuAn A
ON DuAn.MaDuAn = A.MaDuAn
JOIN ChuyenGia ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
JOIN CongTy ON DuAn.MaCongTy = CongTy.MaCongTy
GROUP BY TenCongTy
-- 79. Tìm các chuyên gia có ít nhất một kỹ năng cấp độ 5 nhưng không có kỹ năng nào dưới cấp độ 3.
SELECT A.MaChuyenGia, HoTen
FROM ChuyenGia_KyNang A JOIN ChuyenGia
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY A.MaChuyenGia, HoTen
HAVING COUNT(CASE WHEN CapDo = 5 THEN 1 END) >= 1 AND COUNT(CASE WHEN CapDo <= 3 THEN 1 END) = 0
-- 80. Liệt kê các chuyên gia và số lượng dự án họ tham gia, bao gồm cả những chuyên gia không tham gia dự án nào.
87 %
Results
Messages
TenCongTy
SoLuongDuAn
TongNamKinhNghiem
1 AI Innovate 2 13
2 CloudNine Systems 3 27
3 DataSmart Analytics 2 11
4 SecureNet Vietnam 1 7
5 TechViet Solutions 2 17
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
it_cs_database
00:00:00
5 rows
Ready
Ln 22
Col 1
Ch 1
INS

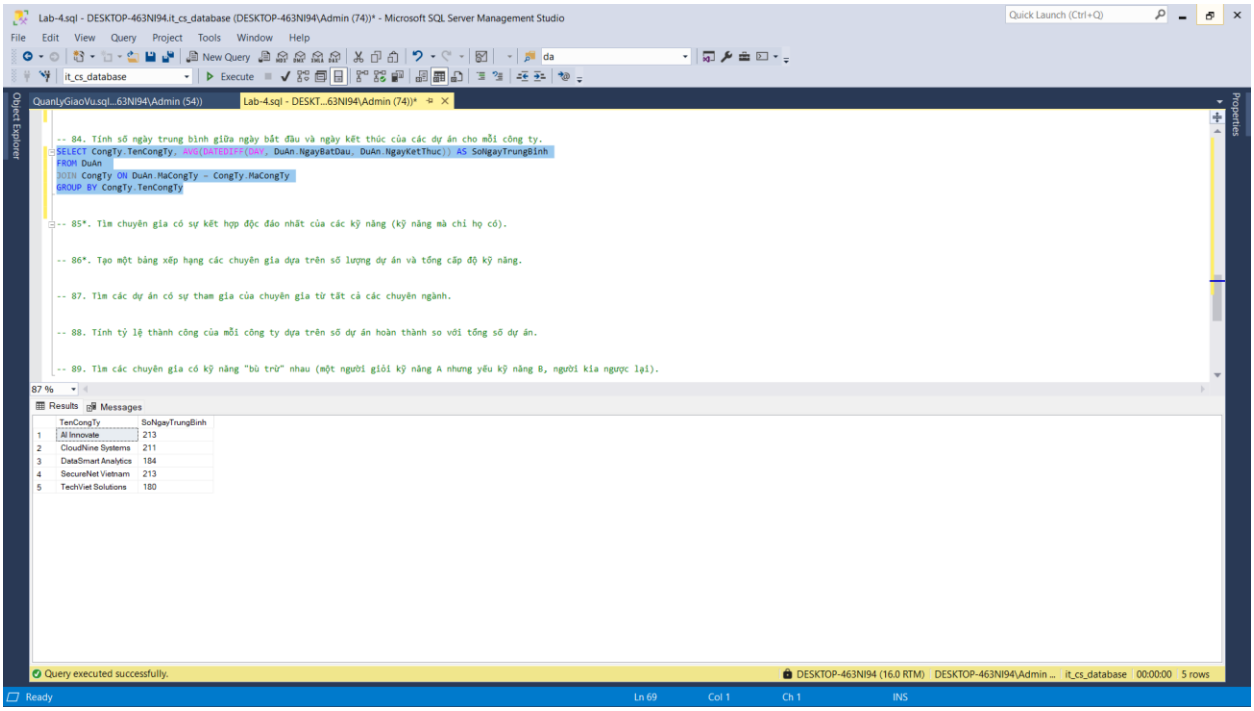

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
cg2.NamKinhNghiem AS NamKinhNghiem_ChuyenGia2
FROM ChuyenGia cg1 JOIN ChuyenGia cg2
ON cg1.ChuyenNganh = cg2.ChuyenNganh
WHERE cg1.MaChuyenGia < cg2.MaChuyenGia AND ABS(cg1.NamKinhNghiem - cg2.NamKinhNghiem) <= 2;
-- 78. Hiển thị tên công ty, số lượng dự án và tổng số năm kinh nghiệm của các chuyên gia tham gia dự án của công ty đó.
SELECT TenCongTy, COUNT(A.MaDuAn) AS SoLuongDuAn, SUM(NamKinhNghiem) AS TongNamKinhNghiem
FROM DuAn JOIN ChuyenGia_DuAn A
ON DuAn.MaDuAn = A.MaDuAn
JOIN ChuyenGia ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
JOIN CongTy ON DuAn.MaCongTy = CongTy.MaCongTy
GROUP BY TenCongTy
-- 79. Tìm các chuyên gia có ít nhất một kỹ năng cấp độ 5 nhưng không có kỹ năng nào dưới cấp độ 3.
SELECT A.MaChuyenGia, HoTen
FROM ChuyenGia_KyNang A JOIN ChuyenGia
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY A.MaChuyenGia, HoTen
HAVING COUNT(CASE WHEN CapDo = 5 THEN 1 END) >= 1 AND COUNT(CASE WHEN CapDo <= 3 THEN 1 END) = 0
-- 80. Liệt kê các chuyên gia và số lượng dự án họ tham gia, bao gồm cả những chuyên gia không tham gia dự án nào.
87 %
Results
Messages
MaChuyenGia HoTen
4 Phạm Thị Dung
5 Hoàng Văn Em
8 Vũ Thị Hương
9 Bùi Văn Inh
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 4 rows
Ready
Ln 29 Col 1 Ch 1 INS

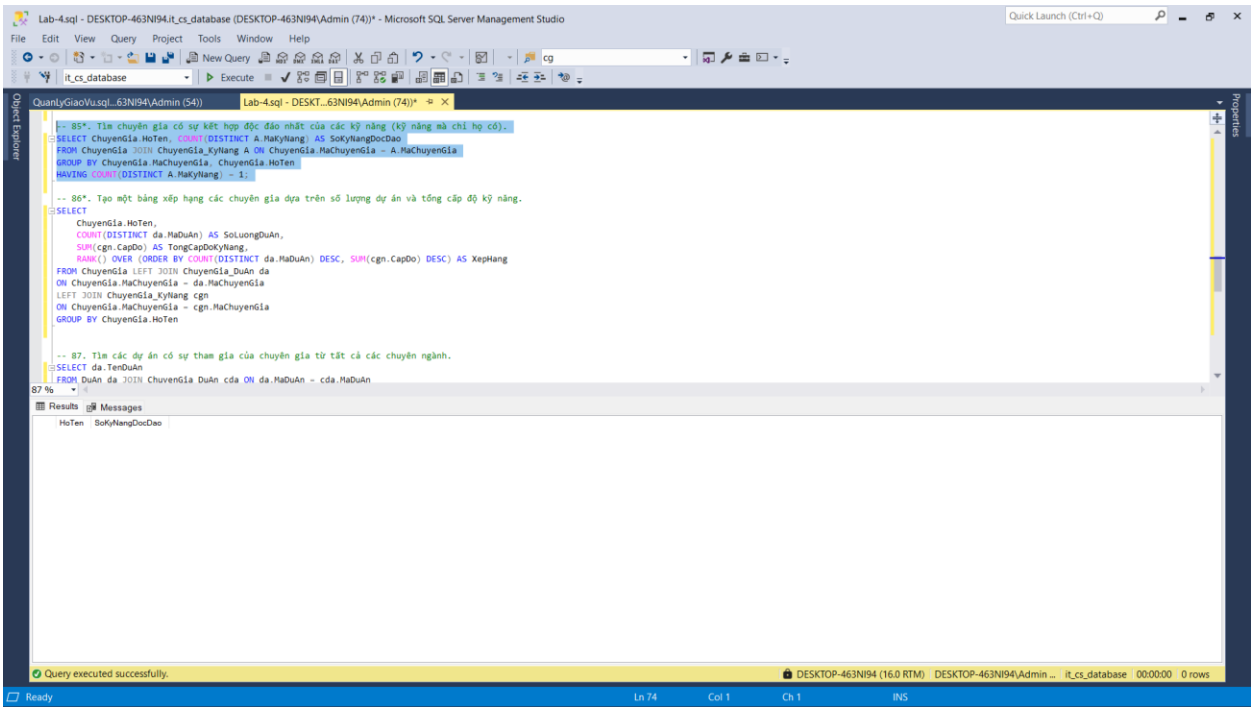

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
JOIN ChuyenGia ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
JOIN CongTy ON DuAn.MaCongTy = CongTy.MaCongTy
GROUP BY TenCongTy
-- 79. Tìm các chuyên gia có ít nhất một kỹ năng cấp độ 5 nhưng không có kỹ năng nào dưới cấp độ 3.
SELECT A.MaChuyenGia, HoTen
FROM ChuyenGia_KyNang A JOIN ChuyenGia
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY A.MaChuyenGia, HoTen
HAVING COUNT(CASE WHEN CapDo = 5 THEN 1 END) >= 1 AND COUNT(CASE WHEN CapDo <= 3 THEN 1 END) = 0
-- 80. Liệt kê các chuyên gia và số lượng dự án họ tham gia, bao gồm cả những chuyên gia không tham gia dự án nào.
SELECT A.MaChuyenGia, HoTen, COUNT(MaDuAn) SoLuongDuAn
FROM ChuyenGia_DuAn A JOIN ChuyenGia
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY A.MaChuyenGia, HoTen
-- 81*. Tìm chuyên gia có kỹ năng ở cấp độ cao nhất trong mỗi loại kỹ năng.
SELECT MAX
FROM ChuyenGia_KyNang
WHERE
87 %
Results
Messages
MaChuyenGia HoTen SoLuongDuAn
1 Nguyễn Văn An 1
2 Trần Thị Bình 1
3 Lê Hoàng Cường 1
4 Phạm Thị Dung 1
5 Hoàng Văn Em 1
6 Ngô Thị Phương 1
7 Đặng Văn Giang 1
8 Vũ Thị Hương 1
9 Bùi Văn Inh 1
10 Lý Thị Khánh 1
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 10 rows
Ready
Ln 37 Col 1 Ch 1 INS

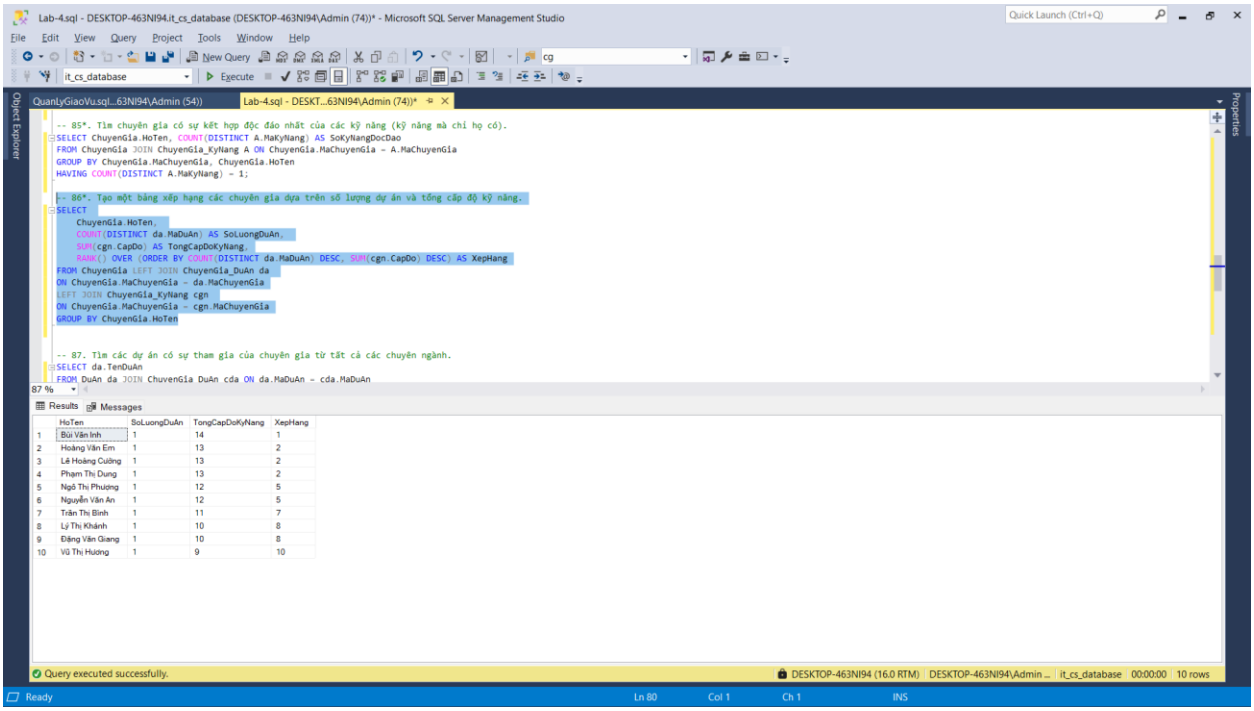

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
GROUP BY A.MaChuyenGia, HoTen
HAVING COUNT(CASE WHEN CapDo = 5 THEN 1 END) >= 1 AND COUNT(CASE WHEN CapDo <= 3 THEN 1 END) = 0
-- 80. Liệt kê các chuyên gia và số lượng dự án họ tham gia, bao gồm cả những chuyên gia không tham gia dự án nào.
SELECT A.MaChuyenGia, HoTen, COUNT(MaDuAn) SoLuongDuAn
FROM ChuyenGia_DuAn A JOIN ChuyenGia
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY A.MaChuyenGia, HoTen
-- 81*. Tìm chuyên gia có kỹ năng ở cấp độ cao nhất trong mỗi loại kỹ năng.
SELECT A.MaChuyenGia, HoTen, TenKyNang, CapDo
FROM (
SELECT MaChuyenGia, MaKyNang, CapDo, RANK() OVER (PARTITION BY MaKyNang ORDER BY CapDo DESC) RANK_KN
FROM ChuyenGia_KyNang
) A JOIN ChuyenGia
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
JOIN KyNang ON A.MaKyNang = KyNang.MaKyNang
WHERE RANK_KN = 1
-- 82. Tính tỷ lệ phần trăm của mỗi chuyên ngành trong tổng số chuyên gia.
87 %
Results
Messages
MaChuyenGia HoTen TenKyNang CapDo
1 1 Nguyễn Văn An Java 5
2 3 Lê Hoàng Cường Python 5
3 3 Lê Hoàng Cường Machine Learning 5
4 5 Hoàng Văn Em AWS 5
5 9 Bùi Văn Inh Docker 5
6 9 Bùi Văn Inh Kubernetes 5
7 6 Ngô Thị Phương SQL 5
8 4 Phạm Thị Dung SQL 5
9 2 Trần Thị Bình NoSQL 4
10 4 Phạm Thị Dung NoSQL 4
11 10 Lý Thị Khánh NoSQL 4
12 8 Vũ Thị Hương React 5
13 8 Vũ Thị Hương Angular 4
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 13 rows
Matches: (
Ln 44 Col 1 Ch 1 INS

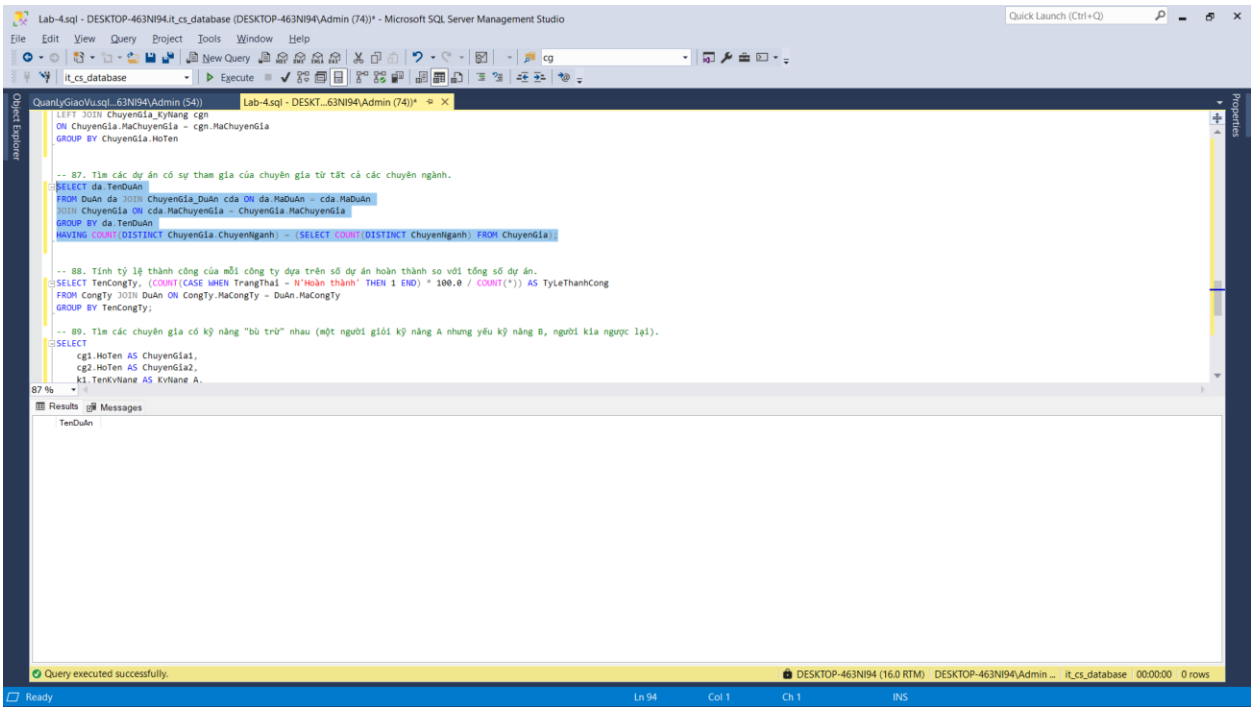

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
ON A.MaChuyenGia = ChuyenGia.MaChuyenGia
JOIN KyNang ON A.MaKyNang = KyNang.MaKyNang
WHERE RANK_KN = 1
-- 82. Tính tỷ lệ phần trăm của mỗi chuyên ngành trong tổng số chuyên gia.
SELECT ChuyenNganh, (COUNT(*) * 100.0 / (SELECT COUNT(*) FROM ChuyenGia)) AS TyLePhanTram
FROM ChuyenGia
GROUP BY ChuyenNganh
-- 83. Tìm các cặp kỹ năng thường xuất hiện cùng nhau nhất trong hồ sơ của các chuyên gia.
-- 84. Tính số ngày trung bình giữa ngày bắt đầu và ngày kết thúc của các dự án cho mỗi công ty.
-- 85*. Tìm chuyên gia có sự kết hợp độc đáo nhất của các kỹ năng (kỹ năng mà chỉ họ có).
-- 86*. Tạo một bảng xếp hạng các chuyên gia dựa trên số lượng dự án và tổng cấp độ kỹ năng.
-- 87. Tìm các dự án có sự tham gia của chuyên gia từ tất cả các chuyên ngành.
87 %
Results
Messages
ChuyenNganh TyLePhanTram
1 An ninh mạng 10.000000000000
2 Blockchain 10.000000000000
3 DevOps 10.000000000000
4 Điện toán đám mây 10.000000000000
5 IoT 10.000000000000
6 Khoa học dữ liệu 10.000000000000
7 Phân tích dữ liệu 10.000000000000
8 Phát triển phần mềm 10.000000000000
9 Trí tuệ nhân tạo 10.000000000000
10 UX/UI Design 10.000000000000
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 10 rows
Ready
Ln 53 Col 1 Ch 1 INS

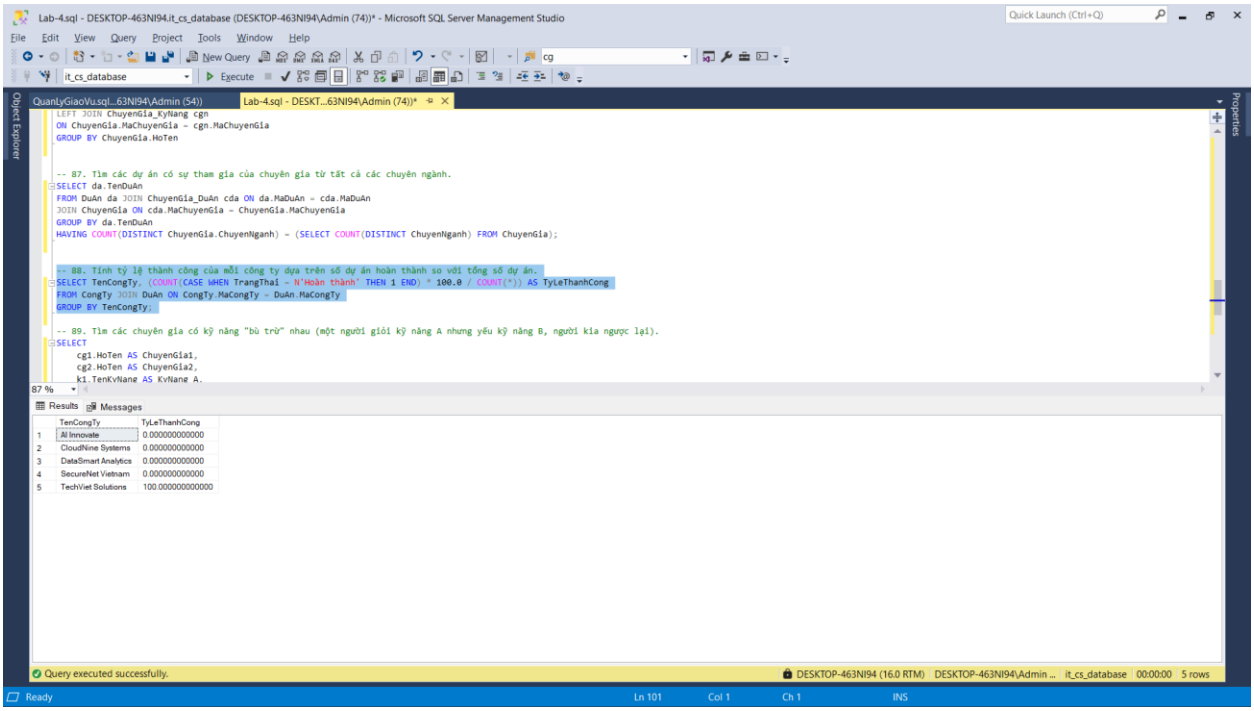

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
it_cs_database
Execute
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
SELECT ChuyenNganh, (COUNT(*) * 100.0 / (SELECT COUNT(*) FROM ChuyenGia)) AS TyLePhanTram
FROM ChuyenGia
GROUP BY ChuyenNganh
-- 83. Tìm các cặp kỹ năng thường xuất hiện cùng nhau nhất trong hồ sơ của các chuyên gia.
SELECT k1.TenKyNang AS KyNang1, k2.TenKyNang AS KyNang2, COUNT(*) AS SoLanCungXuatHien
FROM ChuyenGia_KyNang c1 JOIN ChuyenGia_KyNang c2
ON c1.MaChuyenGia = c2.MaChuyenGia AND c1.MaKyNang < c2.MaKyNang
JOIN KyNang k1 ON c1.MaKyNang = k1.MaKyNang
JOIN KyNang k2 ON c2.MaKyNang = k2.MaKyNang
GROUP BY k1.TenKyNang, k2.TenKyNang
ORDER BY SoLanCungXuatHien DESC
-- 84. Tính số ngày trung bình giữa ngày bắt đầu và ngày kết thúc của các dự án cho mỗi công ty.
-- 85*. Tìm chuyên gia có sự kết hợp độc đáo nhất của các kỹ năng (kỹ năng mà chỉ họ có).
-- 86*. Tạo một bảng xếp hạng các chuyên gia dựa trên số lượng dự án và tổng cấp độ kỹ năng.
87 %
Results Messages
KyNang1 KyNang2 SoLanCungXuatHien
1 Python Machine Learning 4
2 Python NoSQL 3
3 Python SQL 2
4 Machine Learning NoSQL 2
5 AWS Kubernetes 2
6 Docker Kubernetes 2
7 AWS Docker 2
8 Java Docker 1
9 Python Docker 1
10 React Angular 1
11 Machine Learning AWS 1
12 Python AWS 1
13 SQL NoSQL 1
14 Java Python 1
15 Java React 1
16 SQL React 1
17 Java SQL 1
18 Machine Learning SQL 1
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 18 rows
Ready
Ln 9 Col 3 INS

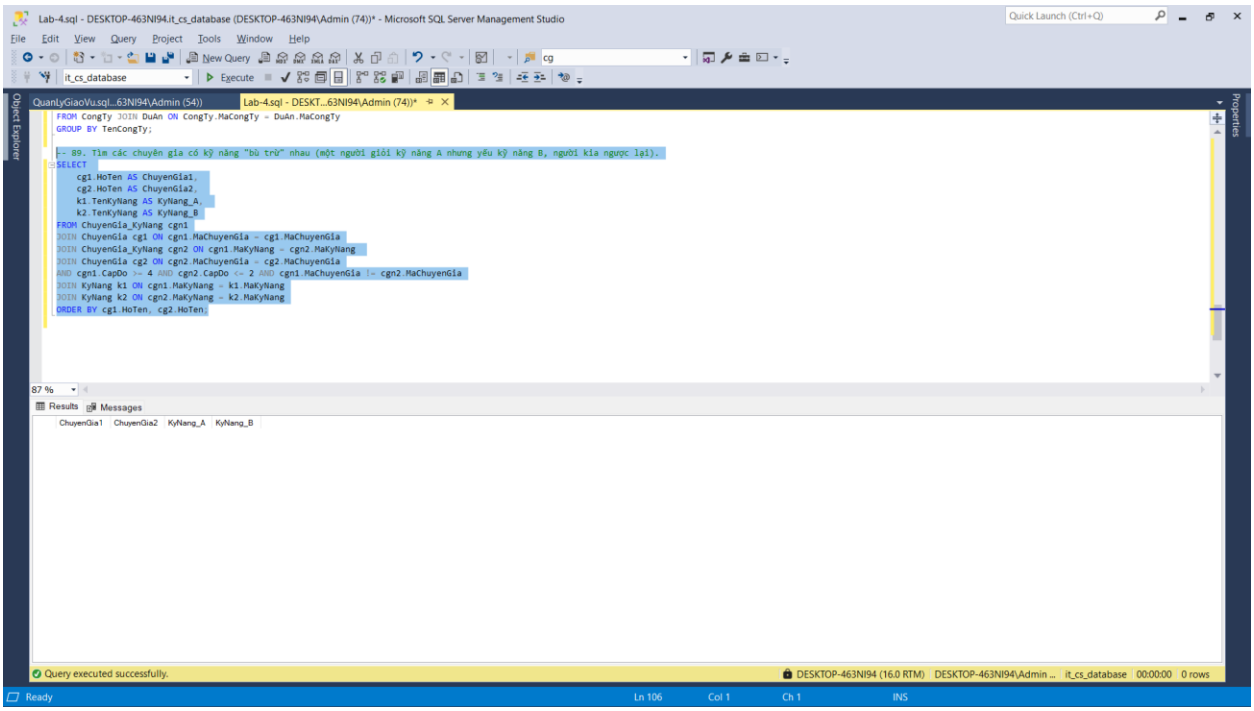

Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
it_cs_database
Execute
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
-- 84. Tính số ngày trung bình giữa ngày bắt đầu và ngày kết thúc của các dự án cho mỗi công ty.
SELECT CongTy.TenCongTy, AVG(DATEDIFF(DAY, DuAn.NgayBatDau, DuAn.NgayKetThuc)) AS SoNgayTrungBinh
FROM DuAn
JOIN CongTy ON DuAn.MaCongTy = CongTy.MaCongTy
GROUP BY CongTy.TenCongTy
-- 85*. Tìm chuyên gia có sự kết hợp độc đáo nhất của các kỹ năng (kỹ năng mà chỉ họ có).
-- 86*. Tạo một bảng xếp hạng các chuyên gia dựa trên số lượng dự án và tổng cấp độ kỹ năng.
-- 87. Tìm các dự án có sự tham gia của chuyên gia từ tất cả các chuyên ngành.
-- 88. Tính tỷ lệ thành công của mỗi công ty dựa trên số dự án hoàn thành so với tổng số dự án.
-- 89. Tìm các chuyên gia có kỹ năng "bù trừ" nhau (một người giỏi kỹ năng A nhưng yếu kỹ năng B, người kia ngược lại).
87 %
Results Messages
TenCongTy SoNgayTrungBinh
1 AI Innovate 213
2 CloudNine Systems 211
3 DataSmart Analytics 184
4 SecureNet Vietnam 213
5 TechViet Solutions 180
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 5 rows
Ready
Ln 69 Col 1 Ch 1 INS


Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
-- 85*. Tìm chuyên gia có sự kết hợp độc đáo nhất của các kỹ năng (kỹ năng mà chỉ họ có).
SELECT ChuyenGia.HoTen, COUNT(DISTINCT A.MaKyNang) AS SoKyNangDocDao
FROM ChuyenGia JOIN ChuyenGia_KyNang A ON ChuyenGia.MaChuyenGia = A.MaChuyenGia
GROUP BY ChuyenGia.MaChuyenGia, ChuyenGia.HoTen
HAVING COUNT(DISTINCT A.MaKyNang) = 1;
-- 86*. Tạo một bảng xếp hạng các chuyên gia dựa trên số lượng dự án và tổng cấp độ kỹ năng.
SELECT
ChuyenGia.HoTen,
COUNT(DISTINCT da.MaDuAn) AS SoLuongDuAn,
SUM(cgn.CapDo) AS TongCapDoKyNang,
RANK() OVER (ORDER BY COUNT(DISTINCT da.MaDuAn) DESC, SUM(cgn.CapDo) DESC) AS XepHang
FROM ChuyenGia LEFT JOIN ChuyenGia_DuAn da
ON ChuyenGia.MaChuyenGia = da.MaChuyenGia
LEFT JOIN ChuyenGia_KyNang cgn
ON ChuyenGia.MaChuyenGia = cgn.MaChuyenGia
GROUP BY ChuyenGia.HoTen
-- 87. Tìm các dự án có sự tham gia của chuyên gia từ tất cả các chuyên ngành.
SELECT da.TenDuAn
FROM DuAn da JOIN ChuyenGia_DuAn cda ON da.MaDuAn = cda.MaDuAn
87 %
Results Messages
HoTen SoKyNangDocDao
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 0 rows
Ready
Ln 74 Col 1 Ch 1 INS


Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
-- 85*. Tìm chuyên gia có sự kết hợp độc đáo nhất của các kỹ năng (kỹ năng mà chỉ họ có).
SELECT ChuyenGia.HoTen, COUNT(DISTINCT A.MaKyNang) AS SoKyNangDocDao
FROM ChuyenGia JOIN ChuyenGia_KyNang A ON ChuyenGia.MaChuyenGia = A.MaChuyenGia
GROUP BY ChuyenGia.MaChuyenGia, ChuyenGia.HoTen
HAVING COUNT(DISTINCT A.MaKyNang) = 1;
-- 86*. Tạo một bảng xếp hạng các chuyên gia dựa trên số lượng dự án và tổng cấp độ kỹ năng.
SELECT
ChuyenGia.HoTen,
COUNT(DISTINCT da.MaDuAn) AS SoLuongDuAn,
SUM(cgn.CapDo) AS TongCapDoKyNang,
RANK() OVER (ORDER BY COUNT(DISTINCT da.MaDuAn) DESC, SUM(cgn.CapDo) DESC) AS XepHang
FROM ChuyenGia LEFT JOIN ChuyenGia_DuAn da
ON ChuyenGia.MaChuyenGia = da.MaChuyenGia
LEFT JOIN ChuyenGia_KyNang cgn
ON ChuyenGia.MaChuyenGia = cgn.MaChuyenGia
GROUP BY ChuyenGia.HoTen
-- 87. Tìm các dự án có sự tham gia của chuyên gia từ tất cả các chuyên ngành.
SELECT da.TenDuAn
FROM DuAn da JOIN ChuyenGia_DuAn cda ON da.MaDuAn = cda.MaDuAn
87 %
Results Messages
HoTen SoLuongDuAn TongCapDoKyNang XepHang
1 Bùi Văn Inh 1 14 1
2 Hoàng Văn Em 1 13 2
3 Lê Hoàng Cường 1 13 2
4 Phạm Thị Dung 1 13 2
5 Ngô Thị Phương 1 12 5
6 Nguyễn Văn An 1 12 5
7 Trần Thị Bình 1 11 7
8 Lý Thị Khánh 1 10 8
9 Đặng Văn Giang 1 10 8
10 Võ Thị Hường 1 9 10
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM) DESKTOP-463NI94\Admin ... it_cs_database 00:00:00 10 rows
Ready
Ln 80 Col 1 Ch 1 INS


Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
LEFT JOIN ChuyenGia_KyNang cgn
ON ChuyenGia.MaChuyenGia = cgn.MaChuyenGia
GROUP BY ChuyenGia.HoTen
-- 87. Tìm các dự án có sự tham gia của chuyên gia từ tất cả các chuyên ngành.
SELECT da.TenDuAn
FROM DuAn da JOIN ChuyenGia_DuAn cda ON da.MaDuAn = cda.MaDuAn
JOIN ChuyenGia ON cda.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY da.TenDuAn
HAVING COUNT(DISTINCT ChuyenGia.ChuyenNganh) = (SELECT COUNT(DISTINCT ChuyenNganh) FROM ChuyenGia);
-- 88. Tính tỷ lệ thành công của mỗi công ty dựa trên số dự án hoàn thành so với tổng số dự án.
SELECT TenCongTy, (COUNT(CASE WHEN TrangThai = N'Hoàn thành' THEN 1 END) * 100.0 / COUNT(*)) AS TyLeThanhCong
FROM CongTy JOIN DuAn ON CongTy.MaCongTy = DuAn.MaCongTy
GROUP BY TenCongTy;
-- 89. Tìm các chuyên gia có kỹ năng "bù trừ" nhau (một người giỏi kỹ năng A nhưng yếu kỹ năng B, người kia ngược lại).
SELECT
cg1.HoTen AS ChuyenGia1,
cg2.HoTen AS ChuyenGia2,
k1.TenKyNang AS KyNang A,
87 %
Results
Messages
TenDuAn
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
it_cs_database
00:00:00
0 rows
Ready
Ln 94
Col 1
Ch 1
INS


Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
LEFT JOIN ChuyenGia_KyNang cgn
ON ChuyenGia.MaChuyenGia = cgn.MaChuyenGia
GROUP BY ChuyenGia.HoTen
-- 87. Tìm các dự án có sự tham gia của chuyên gia từ tất cả các chuyên ngành.
SELECT da.TenDuAn
FROM DuAn da JOIN ChuyenGia_DuAn cda ON da.MaDuAn = cda.MaDuAn
JOIN ChuyenGia ON cda.MaChuyenGia = ChuyenGia.MaChuyenGia
GROUP BY da.TenDuAn
HAVING COUNT(DISTINCT ChuyenGia.ChuyenNganh) = (SELECT COUNT(DISTINCT ChuyenNganh) FROM ChuyenGia);
-- 88. Tính tỷ lệ thành công của mỗi công ty dựa trên số dự án hoàn thành so với tổng số dự án.
SELECT TenCongTy, (COUNT(CASE WHEN TrangThai = N'Hoàn thành' THEN 1 END) * 100.0 / COUNT(*)) AS TyLeThanhCong
FROM CongTy JOIN DuAn ON CongTy.MaCongTy = DuAn.MaCongTy
GROUP BY TenCongTy;
-- 89. Tìm các chuyên gia có kỹ năng "bù trừ" nhau (một người giỏi kỹ năng A nhưng yếu kỹ năng B, người kia ngược lại).
SELECT
cg1.HoTen AS ChuyenGia1,
cg2.HoTen AS ChuyenGia2,
k1.TenKyNang AS KyNang A,
87 %
Results
Messages
TenCongTy
TyLeThanhCong
1 AI Innovate 0.000000000000
2 CloudNine Systems 0.000000000000
3 DataSmart Analytics 0.000000000000
4 SecureNet Vietnam 0.000000000000
5 TechViet Solutions 100.000000000000
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
it_cs_database
00:00:00
5 rows
Ready
Ln 101
Col 1
Ch 1
INS


Lab-4.sql - DESKTOP-463NI94.it_cs_database (DESKTOP-463NI94\Admin (74))* - Microsoft SQL Server Management Studio
Quick Launch (Ctrl+Q)
File Edit View Query Project Tools Window Help
New Query
Execute
it_cs_database
QuanLyGiaoVu.sql...63NI94\Admin (54))
Lab-4.sql - DESKT...63NI94\Admin (74))*
Object Explorer
Properties
FROM CongTy JOIN DuAn ON CongTy.MaCongTy = DuAn.MaCongTy
GROUP BY TenCongTy;
-- 89. Tìm các chuyên gia có kỹ năng "bù trừ" nhau (một người giỏi kỹ năng A nhưng yếu kỹ năng B, người kia ngược lại).
SELECT
cg1.HoTen AS ChuyenGia1,
cg2.HoTen AS ChuyenGia2,
k1.TenKyNang AS KyNang_A,
k2.TenKyNang AS KyNang_B
FROM ChuyenGia_KyNang cgn1
JOIN ChuyenGia cg1 ON cgn1.MaChuyenGia = cg1.MaChuyenGia
JOIN ChuyenGia_KyNang cgn2 ON cgn1.MaKyNang = cgn2.MaKyNang
JOIN ChuyenGia cg2 ON cgn2.MaChuyenGia = cg2.MaChuyenGia
AND cgn1.CapDo >= 4 AND cgn2.CapDo <= 2 AND cgn1.MaChuyenGia < cgn2.MaChuyenGia
JOIN KyNang k1 ON cgn1.MaKyNang = k1.MaKyNang
JOIN KyNang k2 ON cgn2.MaKyNang = k2.MaKyNang
ORDER BY cg1.HoTen, cg2.HoTen;
87 %
Results
Messages
ChuyenGia1
ChuyenGia2
KyNang_A
KyNang_B
Query executed successfully.
DESKTOP-463NI94 (16.0 RTM)
DESKTOP-463NI94\Admin ...
it_cs_database
00:00:00
0 rows
Ready
Ln 106
Col 1
Ch 1
INS