

Bài Lab 2 (Nhóm)

Nhóm XYZ

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3. Yêu cầu thực hành

e)

```
--e)
create proc SP_SEL_NO_ENCRYPT
(
    @tenclb NVARCHAR(100),
    @tenqg NVARCHAR(100)
)
As
Begin
    select CT.MACT, CT.HOTEN, CT.NGAYSINH, CT.DIACHI, CT.VITRI
    from CAUTHU CT join CAULACBO CLB on CT.MACLB = CLB.MACLB
                join QUOCGIA QG on CT.MAQG = QG.MAQG
    where CLB.TENCLB = @tenclb and QG.TENQG = @tenqg
END
```

f)

```
--f)
create proc SP_SEL_ENCRYPT @tenclb NVARCHAR(100), @tenqg NVARCHAR(100)
with ENCRYPTION
As
Begin
    select CT.MACT, CT.HOTEN, CT.NGAYSINH, CT.DIACHI, CT.VITRI
    from dbo.CAUTHU CT join dbo.CAULACBO CLB on CT.MACLB = CLB.MACLB
                join dbo.QUOCGIA QG on CT.MAQG = QG.MAQG
    where CLB.TENCLB = @tenclb and QG.TENQG = @tenqg
End
go
```

g)

Thực thi 2 stored procedure trên với tham số truyền vào @TenCLB = “SHB Đà Nẵng” và @TenQG = “Brazil” thì kết quả là giống nhau

The screenshot shows a SQL Server query window with the following code:

```
exec sp_helptext 'SP_SEL_NO_ENCRYPT' ;  
  
execute SP_SEL_NO_ENCRYPT N'SHB Đà Nẵng' , 'Brazil' ;  
execute SP_SEL_ENCRYPT N'SHB Đà Nẵng' , 'Brazil' ;
```

Below the code, the 'Results' tab is selected, displaying two identical tables. Each table has 6 columns: MACT, HOTEN, NGAYSINH, DIACHI, and VITRI. The first table has 2 rows, and the second table also has 2 rows.

	MACT	HOTEN	NGAYSINH	DIACHI	VITRI
1	6	Ronaldo	1989-12-12 00:00:00.000	NULL	Tiền vệ
2	7	Robinho	1989-10-12 00:00:00.000	NULL	Tiền vệ

	MACT	HOTEN	NGAYSINH	DIACHI	VITRI
1	6	Ronaldo	1989-12-12 00:00:00.000	NULL	Tiền vệ
2	7	Robinho	1989-10-12 00:00:00.000	NULL	Tiền vệ

Dùng lệnh sp_helptext để xem cấu trúc của stored procedure

```
exec sp_helptext 'SP_SEL_ENCRYPT' ;  
exec sp_helptext 'SP_SEL_NO_ENCRYPT' ;
```

- Kết quả

Với NO_ENCRYPT

Results		Messages
	Text	
1	CREATE proc SP_SEL_NO_ENCRYPT	
2	(
3	@tenclb NVARCHAR(100),	
4	@tenqg NVARCHAR(100)	
5)	
6	As	
7	Begin	
8	select CT.MACT, CT.HOTEN, CT.NGAYSINH, CT.DIACHI, CT....	
9	join CAULACBO CLB on CT.MACLB = CLB.MACLB	
10	join QUOCGIA QG on CT.MAQQ = QG.MAQQ	
11	where CLB.TENCLB = @TenCLB and QG.TENQG = @TenQG	
12	END	

Với ENCRYPT

Messages
The text for object 'SP_SEL_ENCRYPT' is encrypted.
Completion time: 2023-03-15T20:21:42.9277983+07:00

Kết luận: Ta nhận thấy cả 2 stored procedure ở bên trên đều trả ra kết quả như nhau. Nhưng khi sử dụng lệnh sp_helptext để xem đoạn code thì SP_SEL_ENCRYPT không xem được nội dung của stored procedure do đã được mã hóa

h) Tạo một bảng chứa các procedure_name rồi sau đó viết script alter procedure để bổ sung with encrypt

i)

A. Tạo View

```
--h)
--vCau1
CREATE VIEW vCAU1 AS
SELECT MACT,HOTEN, DIACHI, VITRI, NGAYSINH
FROM CAUTHU CT join CAULACBO CLB on CT.MACLB= CLB.MACLB
      join QUOCGIA QG on QG.MAQG = CT.MAQG
WHERE QG.TENQG='Brazil' and CLB.TENCLB=N'SHB Đà Nẵng';

--vCau2
CREATE VIEW vCAU2 as
SELECT MATRAN, NGAYTD, clb1.TENCLB as TENCLB1,clb2.TENCLB as TENCLB2, SANVD.TENSAN,TRANDAU.KETQUA
from TRANDAU join CAULACBO as clb1 on TRANDAU.MACLB1=clb1.MACLB
      join CAULACBO as clb2 on TRANDAU.MACLB2=clb2.MACLB
      join SANVD on TRANDAU.MASAN=SANVD.MASAN
where TRANDAU.NAM='2009' and TRANDAU.VONG='3' and clb1.TENCLB!=clb2.TENCLB

--vCau3
create view vCau3 as
select HLV.MAHLV, HLV.TENHLV, HLV.NGAYSINH, HLV.DIACHI, HLV_CLB.VAITRO, CLB.TENCLB
from HLV_CLB join HUANLUYENVIEU as HLV on HLV.MAHLV = HLV_CLB.MAHLV
      join QUOCGIA as QG on HLV.MAQG = QG.MAQG
      join CAULACBO as CLB on HLV_CLB.MACLB = CLB.MACLB
where QG.TENQG like N'Việt Nam'

--vCau4
CREATE VIEW vCAU4 as
select CAULACBO.MACLB, CAULACBO.TENCLB, SANVD.TENSAN, SANVD.DIACHI, COUNT(CAULACBO.MACLB) as SOCAUTHUNUOCNGOAI
from CAUTHU join CAULACBO on CAUTHU.MACLB=CAULACBO.MACLB
      join SANVD on CAULACBO.MASAN=SANVD.MASAN
      join QUOCGIA on CAUTHU.MAQG=QUOCGIA.MAQG
where QUOCGIA.TENQG!=N'Việt Nam'
group by CAULACBO.MACLB,CAULACBO.TENCLB, SANVD.TENSAN, SANVD.DIACHI
having COUNT(CAULACBO.MACLB)>2

--vCau5
create view vCAU5 as
select TINH.TENTINH, count(ct.VITRI) as SOLUONGCAUTHUTIENTIAO
from TINH join CAULACBO clb on clb.MATINH=TINH.MATINH
      join CAUTHU ct on ct.MACLB=clb.MACLB
where ct.VITRI=N'Tiền Đạo'
group by TINH.TENTINH

--vCau6
create view vCAU6 as
select CAULACBO.TENCLB, TINH.TENTINH
from BANGXH join CAULACBO on BANGXH.MACLB=CAULACBO.MACLB
      join TINH on CAULACBO.MATINH= TINH.MATINH
where BANGXH.VONG='3' and BANGXH.HANG='1'
```

--vCau7

```
create view vCau7 as
select HLV.TENHLV
from HLV_CLB join HUANLUYENVIENT as HLV on HLV_CLB.MAHLV = HLV.MAHLV
join CAULACBO as CLB on HLV_CLB.MACLB = CLB.MACLB
where HLV.DIENTHOAI is null and HLV_CLB.VAITRO is not null
```

--vCau8

```
create view vCau8 as
select HLV.TENHLV
from HUANLUYENVIENT as HLV inner join QUOCGIA as QG on HLV.MAQG = QG.MAQG
where QG.TENQG <> N'Việt Nam'
except
select HLV.TENHLV
from HLV_CLB inner join HUANLUYENVIENT as HLV on HLV_CLB.MAHLV = HLV.MAHLV
inner join CAULACBO as CLB on HLV_CLB.MACLB = CLB.MACLB
```

--vCau9

```
create view vCau9 as
select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
from BANGXH
where BANGXH.VONG = 3 and BANGXH.NAM = 2009
order by BANGXH.DIEM desc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB1

union
select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
from BANGXH
where BANGXH.VONG = 3 and BANGXH.NAM = 2009
order by BANGXH.DIEM desc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB2
```

--vCau10

```
create view vCau10 as
select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
from BANGXH
where BANGXH.VONG = 3 and BANGXH.NAM = 2009
order by BANGXH.DIEM asc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB1

union
select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
from BANGXH
where BANGXH.VONG = 3 and BANGXH.NAM = 2009
order by BANGXH.DIEM asc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB2
```

B. Phân quyền view cho các User

```
----grant view permission----  
use QLBongDa  
--BDRead--  
grant select,view definition to BDRead  
--BDU01  
grant select,view definition on vCau5 to BDU01  
grant select,view definition on vCau6 to BDU01  
grant select,view definition on vCau7 to BDU01  
grant select,view definition on vCau8 to BDU01  
grant select,view definition on vCau9 to BDU01  
grant select,view definition on vCau10 to BDU01  
  
--BDU03  
grant select,view definition on vCau1 to BDU03  
grant select,view definition on vCau2 to BDU03  
grant select,view definition on vCau3 to BDU03  
grant select,view definition on vCau4 to BDU03  
  
--BDU04  
grant select,view definition on vCau1 to BDU04  
grant select,view definition on vCau2 to BDU04  
grant select,view definition on vCau3 to BDU04  
grant select,view definition on vCau4 to BDU04
```

C. Test và kết quả

- BDRRead

SQLQuery1.sql - D...ongDa (BDRRead (53))* X Lab2nhom.sql - D...

```
--BDRRead--  
SELECT * FROM vCau1  
SELECT * FROM vCau5
```

110 %

Results Messages

	MACT	HOTEN	DIACHI	VITRI	NGAYSINH
1	6	Ronaldo	NULL	Tiền vệ	1989-12-12 00:00:00.000
2	7	Robinho	NULL	Tiền vệ	1989-10-12 00:00:00.000

	TENTINH	SOLUONGCAUTHUTIENDAO
1	Gia Lai	1

- BDU01

SQLQuery2.sql - D...ongDa (BDU01 (63))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))*

```
--BDU01--  
SELECT * FROM vCau2  
SELECT * FROM vCau10
```

110 %

Results Messages

	NGAYTD	TENSAN	TENCLB1	TENCLB2	KETQUA
1	2009-02-07 00:00:00.000	Gò Đậu	BECAMEX BÌNH DƯƠNG	SHB ĐÀ NẴNG	3-0
2	2009-02-16 00:00:00.000	Chi Lăng	SHB ĐÀ NẴNG	KHATOCO KHÁNH HÒA	2-2

```

SQLQuery2.sql - D...ongDa (BDU01 (63))*  X Lab2nhom.sql - DE...S75JGSP\ASUS (57))*
--BDU01--
SELECT * FROM vCau2
SELECT * FROM vCau10
110 %
Results Messages
Msg 229, Level 14, State 5, Line 2
The SELECT permission was denied on the object 'vCAU2', database 'QLBongDa', schema 'dbo'.

(2 rows affected)

Completion time: 2023-03-15T20:51:45.8080766+07:00

```

Ta thấy rằng BDU01 bị từ chối quyền truy cập vCau2 còn vCau10 hoạt động tốt.
 Lý do là BDU01 không được phân quyền sử dụng vCau2.

- BDU03

```

SQLQuery4.sql - D...ongDa (BDU03 (55))*  X Lab2nhom.sql - DE...S75JGSP\ASUS (57))*
--BDU03--
SELECT * FROM vCau1
SELECT * FROM vCau2
SELECT * FROM vCau3
SELECT * FROM vCau4
110 %
Results Messages

```

	MACT	HOTEN	DIACHI	VITRI	NGAYSINH
1	6	Ronaldo	NULL	Tiền vệ	1989-12-12 00:00:00.000
2	7	Robinho	NULL	Tiền vệ	1989-10-12 00:00:00.000

	MATRAN	NGAYTD	TENCLB1	TENCLB2	TENSAN	KETQUA
1	5	2009-03-01 00:00:00.000	THẾP PHÚ YÊN	GẠCH ĐỒNG TÂM LONG AN	Tuy Hòa	0-2
2	6	2009-03-01 00:00:00.000	KHATOCO KHÁNH HÒA	BECAMEX BÌNH DƯƠNG	Nha Trang	0-1

	MAHLV	TENHLV	NGAYSINH	DIACHI	TENCLB
1	HLV02	Lê Huỳnh Đức	1972-05-20 00:00:00.000	NULL	SHB ĐÀ NẴNG
2	HLV04	Hoàng Anh Tuấn	1970-06-10 00:00:00.000	NULL	KHATOCO KHÁNH HÒA
3	HLV05	Trần Công Minh	1973-07-07 00:00:00.000	NULL	GẠCH ĐỒNG TÂM LONG AN
4	HLV06	Trần Văn Phúc	1965-02-03 00:00:00.000	NULL	BECAMEX BÌNH DƯƠNG

	MACLB	TENCLB	TENSAN	DIACHI	SOLUONG
--	-------	--------	--------	--------	---------

- BDU04

SQLQuery5.sql - D...ongDa (BDU04 (59))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))*

-- BDU04--
SELECT * FROM vCau1
SELECT * FROM vCau2
SELECT * FROM vCau3
SELECT * FROM vCau4

110 %

Results Messages

	MACT	HOTEN	DIACHI	VITRI	NGAYSINH
1	6	Ronaldo	NULL	Tiền vệ	1989-12-12 00:00:00.000
2	7	Robinho	NULL	Tiền vệ	1989-10-12 00:00:00.000

	MATRAN	NGAYTD	TENCLB1	TENCLB2	TENSAN	KETQUA
1	5	2009-03-01 00:00:00.000	THÉP PHÚ YẾN	GẠCH ĐỒNG TÂM LONG AN	Tuy Hòa	0-2
2	6	2009-03-01 00:00:00.000	KHATOCO KHÁNH HÒA	BECAMEX BÌNH DƯƠNG	Nha Trang	0-1

	MAHLV	TENHLV	NGAYSINH	DIACHI	TENCLB
1	HLV02	Lê Huỳnh Đức	1972-05-20 00:00:00.000	NULL	SHB ĐÀ NẴNG
2	HLV04	Hoàng Anh Tuấn	1970-06-10 00:00:00.000	NULL	KHATOCO KHÁNH HÒA
3	HLV05	Trần Công Minh	1973-07-07 00:00:00.000	NULL	GẠCH ĐỒNG TÂM LONG AN
4	HLV06	Trần Văn Phúc	1965-02-03 00:00:00.000	NULL	BECAMEX BÌNH DƯƠNG

	MACLB	TENCLB	TENSAN	DIACHI	SOLUONG
--	-------	--------	--------	--------	---------

STT	Tên User	Thực thi câu select	Giải thích kết quả
1	BDRRead	SELECT * FROM vCau1 SELECT * FROM vCau5	Thực thi được do user được phép truy xuất tất cả các view
2	BDU01	SELECT * FROM vCau2 SELECT * FROM vCau10	Thực thi được vCau10 nhưng không được vCau2 do user chỉ được phân quyền truy xuất từ vCau5=>vCau10
3	BDU03	SELECT * FROM vCau1 SELECT * FROM vCau2 SELECT * FROM vCau3 SELECT * FROM vCau4	Thực thi được các view do được phân quyền truy xuất từ vCau1=>vCau4
4	BDU04	SELECT * FROM vCau1 SELECT * FROM vCau2 SELECT * FROM vCau3 SELECT * FROM vCau4	Thực thi được các view do được phân quyền truy xuất từ vCau1 => vCau4

j)

A. Tạo Stored Procedure

```
--SPCau1
create proc SPCau1 @TenCLB NVARCHAR(100), @TenQG NVARCHAR(60)
as begin
]
    select CT.MACT, CT.HOTEN, CT.NGAYSINH, CT.DIACHI, CT.VITRI
    from CAUTHU as CT join CAULACBO on CT.MACLB = CAULACBO.MACLB
        join QUOCGIA on CT.MAQG = QUOCGIA.MAQG
    where CAULACBO.TENCLB = @TenCLB and QUOCGIA.TENQG = @TenQG
-
end

EXEC SPCau1 @TenCLB = N'SHB Đà Nẵng', @TenQG = N'Brazil';
go

--SPCau2
create proc SPCau2 @Vong int, @nam int
as begin
]
    SELECT MATRAN, NGAYTD, clb1.TENCLB as TENCLB1, clb2.TENCLB as TENCLB2, SANVD.TENSAN, TRANDAU.KETQUA
    from TRANDAU join CAULACBO as clb1 on TRANDAU.MACLB1=clb1.MACLB
        join CAULACBO as clb2 on TRANDAU.MACLB2=clb2.MACLB
        join SANVD on TRANDAU.MASAN=SANVD.MASAN
    where TRANDAU.NAM=@nam and TRANDAU.VONG=@vong and clb1.TENCLB!=clb2.TENCLB
-
end
go

Exec SPCau2 @vong = '3', @nam = '2009'
go

--SPCau3
create proc SPCau3 @TenQG NVARCHAR(60)
as begin
]
    select HLV.MAHLV, HLV.TENHLV, HLV.NGAYSINH, HLV.DIACHI, HLV_CLB.VAITRO, CLB.TENCLB
    from HLV_CLB join HUANLUYENVIENT as HLV on HLV.MAHLV = HLV_CLB.MAHLV
        join QUOCGIA as QG on HLV.MAQG = QG.MAQG
        join CAULACBO as CLB on HLV_CLB.MACLB = CLB.MACLB
    where QG.TENQG = @TenQG
-
end

exec spCau3 @tenqg = N'Việt Nam'
go

--SPCau4
CREATE proc spCau4 @TenQG NVARCHAR(60)
as begin
]
    select CAULACBO.MACLB, CAULACBO.TENCLB, SANVD.TENSAN, SANVD.DIACHI, COUNT(CAULACBO.MACLB) as SOCAUTHUNUOCNGOAI
    from CAUTHU join CAULACBO on CAUTHU.MACLB=CAULACBO.MACLB
        join SANVD on CAULACBO.MASAN=SANVD.MASAN
        join QUOCGIA on CAUTHU.MAQG=QUOCGIA.MAQG
    where QUOCGIA.TENQG!=@TenQG
    group by CAULACBO.MACLB, CAULACBO.TENCLB, SANVD.TENSAN, SANVD.DIACHI
    having COUNT(CAULACBO.MACLB)>2;
-
end

exec spCau4 @tenqg = N'Việt Nam'
go
```

```
--SPCau5
create proc SPCau5 @Vitri NVARCHAR(20)
as begin
    select TINH.TENTINH, count(ct.VITRI) as SOLUONGCAUTHUTIENDAO
    from TINH join CAULACBO clb on clb.MATINH=TINH.MATINH
        join CAUTHU ct on ct.MACLB=clb.MACLB
    where ct.VITRI=@Vitri
    group by TINH.TENTINH
end

exec spCau5 @vitri = N'Tiền Đạo'
go
```

```
--SPCau6
create proc SPCau6 @Vong int, @Hang int
as begin
    select CAULACBO.TENCLB, TINH.TENTINH
    from BANGXH join CAULACBO on BANGXH.MACLB=CAULACBO.MACLB
        join TINH on CAULACBO.MATINH= TINH.MATINH
    where BANGXH.VONG=@Vong and BANGXH.HANG=@Hang
end

exec SPCau6 @vong = '3', @hang = '1'
go
```

```
--SPCau7
create proc SPCau7 @VaiTro NVARCHAR(100)
as begin
    select HLV.TENHLV
    from HLV_CLB join HUANLUYENVNIEN as HLV on HLV_CLB.MAHLV = HLV.MAHLV
        join CAULACBO as CLB on HLV_CLB.MACLB = CLB.MACLB
    where HLV.DIENTHOAI is null and HLV_CLB.VAITRO = @VaiTro
end
exec SPCau7 @VaiTro='HLV chính'
go

--SPCau8
create proc SPCau8 @tenqg NVARCHAR(100)
as begin
    select HLV.TENHLV
    from HUANLUYENVNIEN as HLV inner join QUOCGIA as QG on HLV.MAQG = QG.MAQG
    where QG.TENQG <> @tenqg
except
    select HLV.TENHLV
    from HLV_CLB inner join HUANLUYENVNIEN as HLV on HLV_CLB.MAHLV = HLV.MAHLV
        inner join CAULACBO as CLB on HLV_CLB.MACLB = CLB.MACLB
end

exec spCau8 @tenqg = N'Việt Nam'
go

--SPCau9
create proc SPCau9 @Vong int, @Nam int
as begin
    select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
    from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
        inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
        inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
        inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
            from BANGXH
            where BANGXH.VONG = @Vong and BANGXH.NAM = @Nam
            order by BANGXH.DIEM desc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB1
union
    select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
    from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
        inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
        inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
        inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
            from BANGXH
            where BANGXH.VONG = @Vong and BANGXH.NAM = @Nam
            order by BANGXH.DIEM desc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB2
end
exec spCau9 @Vong = '3' , @Nam = '2009'
go
```

```

--SPCau10
create proc SPCau10 @Vong int, @Nam int
as begin
    select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
    from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
        inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
        inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
        inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
            from BANGXH
            where BANGXH.VONG = @Vong and BANGXH.NAM = @Nam
            order by BANGXH.DIEM asc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB1

    union
    select TD.NGAYTD, SVD.TENSAN, CLB1.TENCLB as TENCLB1, CLB2.TENCLB as TENCLB2, TD.KETQUA
    from TRANDAU as TD inner join SANVD as SVD on TD.MASAN = SVD.MASAN
        inner join CAULACBO as CLB1 on TD.MACLB1 = CLB1.MACLB
        inner join CAULACBO as CLB2 on TD.MACLB2 = CLB2.MACLB
        inner join (select top(1) BANGXH.MACLB, BANGXH.VONG, BANGXH.NAM
            from BANGXH
            where BANGXH.VONG = @Vong and BANGXH.NAM = @Nam
            order by BANGXH.DIEM asc) as BXH on BXH.NAM >= TD.NAM and BXH.VONG >= TD.VONG and BXH.MACLB = TD.MACLB2

end

exec spCau10 @vong = '3', @nam = '2009'
go

```

B. Phân quyền stored procedure cho các user

```
--grant stored procedure permission--
use QLBongDa
--BDRead--
grant execute to BDRead

--BDU01

grant execute on object::SPCAU5 to BDU01
grant execute on object::SPCau6 to BDU01
grant execute on object::SPCau7 to BDU01
grant execute on object::SPCau8 to BDU01
grant execute on object::SPCau9 to BDU01
grant execute on object::SPCau10 to BDU01

--BDU03
grant execute on object::SPCau1 to BDU03
grant execute on object::SPCau2 to BDU03
grant execute on object::SPCau3 to BDU03
grant execute on object::SPCau4 to BDU03

--BDU04
grant execute on object::SPCau1 to BDU04
grant execute on object::SPCau2 to BDU04
grant execute on object::SPCau3 to BDU04
grant execute on object::SPCau4 to BDU04
```

C. Test và kết quả

- BDRRead

SQLQuery6.sql - D...ngDa (BDRRead (53))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))

```
--BDRRead--  
exec SPCau1 N'SHB Đà Nẵng', N'Brazil'  
exec SPCau9 3, 2009
```

110 %

Results Messages

	MACT	HOTEN	NGAYSINH	DIACHI	VITRI
1	6	Ronaldo	1989-12-12 00:00:00.000	NULL	Tiền vệ
2	7	Robinho	1989-10-12 00:00:00.000	NULL	Tiền vệ

	NGAYTD	TENSAN	TENCLB1	TENCLB2	KETQUA
1	2009-02-07 00:00:00.000	Gò Đậu	BECAMEX BÌNH DƯƠNG	SHB ĐÀ NẴNG	3-0
2	2009-02-16 00:00:00.000	Tuy Hòa	THẾP PHÚ YÊN	BECAMEX BÌNH DƯƠNG	5-0
3	2009-03-01 00:00:00.000	Nha Trang	KHATOCO KHÁNH HÒA	BECAMEX BÌNH DƯƠNG	0-1

- BDU01

SQLQuery7.sql - D...ongDa (BDU01 (55))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))

```
--BDU01--  
exec SPCau3 N'Việt Nam'  
exec SPCau10 3, 2009
```

110 %

Results Messages

	NGAYTD	TENSAN	TENCLB1	TENCLB2	KETQUA
1	2009-02-07 00:00:00.000	Gò Đậu	BECAMEX BÌNH DƯƠNG	SHB ĐÀ NẴNG	3-0
2	2009-02-16 00:00:00.000	Chi Lăng	SHB ĐÀ NẴNG	KHATOCO KHÁNH HÒA	2-2


```
SQLQuery7.sql - D...ongDa (BDU01 (55))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))
--BDU01--
exec SPCau3 N'Việt Nam'
exec SPCau10 3, 2009
```

110 %

Results Messages

Msg 229, Level 14, State 5, Procedure SPCau3, Line 1 [Batch Start Line 1]
The EXECUTE permission was denied on the object 'SPCau3', database 'QLBongDa', schema 'dbo'.

(2 rows affected)

Completion time: 2023-03-15T21:47:06.5386814+07:00

- BDU03

```
SQLQuery8.sql - D...ongDa (BDU03 (59))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))
--BDU03--
exec SPCau1 N'SHB Đà Nẵng', N'Brazil'
exec SPCau3 N'Việt Nam'
exec SPCau4 N'Việt Nam'
exec SPCau10 3, 2009
```

110 %

Results Messages

(2 rows affected)

(4 rows affected)

(0 rows affected)

Msg 229, Level 14, State 5, Procedure SPCau10, Line 1 [Batch Start Line 1]
The EXECUTE permission was denied on the object 'SPCau10', database 'QLBongDa', schema 'dbo'.

Completion time: 2023-03-15T21:49:24.2453910+07:00

SQLQuery8.sql - D...ongDa (BDU03 (59))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))

```
--BDU03--
exec SPCau1 N'SHB Đà Nẵng', N'Brazil'
exec SPCau3 N'Việt Nam'
exec SPCau4 N'Việt Nam'
exec SPCau10 3, 2009
```

110 %

Results Messages

	MACT	HOTEN	NGAYSINH	DIACHI	VITRI
1	6	Ronaldo	1989-12-12 00:00:00.000	NULL	Tiền vệ
2	7	Robinho	1989-10-12 00:00:00.000	NULL	Tiền vệ

	MAHLV	TENHLV	NGAYSINH	DIACHI	VAITRO	TENCLB
1	HLV02	Lê Huỳnh Đức	1972-05-20 00:00:00.000	NULL	HLV Chính	SHB ĐÀ NẴNG
2	HLV04	Hoàng Anh Tuấn	1970-06-10 00:00:00.000	NULL	HLV Chính	KHATOCO KHÁNH HÒA
3	HLV05	Trần Công Minh	1973-07-07 00:00:00.000	NULL	HLV Chính	GẠCH ĐỒNG TÂM LONG AN
4	HLV06	Trần Văn Phúc	1965-02-03 00:00:00.000	NULL	HLV thủ môn	BECAMEX BÌNH DƯƠNG

	MACLB	TENCLB	TENSAN	DIACHI	SOCAUTHUNUOCNGOAI
--	-------	--------	--------	--------	-------------------

- BDU04

SQLQuery9.sql - D...ongDa (BDU04 (56))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))

```
--BDU04--
exec SPCau1 N'SHB Đà Nẵng', N'Brazil'
exec SPCau3 N'Việt Nam'
exec SPCau4 N'Việt Nam'
exec SPCau10 3, 2009
```

110 %

Results Messages

(2 rows affected)

(4 rows affected)

(0 rows affected)

Msg 229, Level 14, State 5, Procedure SPCau10, Line 1 [Batch Start Line 1]
The EXECUTE permission was denied on the object 'SPCau10', database 'QLBongDa', schema 'dbo'.

Completion time: 2023-03-15T21:51:22.1384321+07:00

SQLQuery9.sql - D...ongDa (BDU04 (56))* X Lab2nhom.sql - DE...S75JGSP\ASUS (57))

--BDU04--

```
exec SPCau1 N'SHB Đà Nẵng', N'Brazil'  
exec SPCau3 N'Việt Nam'  
exec SPCau4 N'Việt Nam'  
exec SPCau10 3, 2009
```

110 %

Results Messages

	MACT	HOTEN	NGAYSINH	DIACHI	VITRI
1	6	Ronaldo	1989-12-12 00:00:00.000	NULL	Tiền vệ
2	7	Robinho	1989-10-12 00:00:00.000	NULL	Tiền vệ

	MAHLV	TENHLV	NGAYSINH	DIACHI	VAITRO	TENCLB
1	HLV02	Lê Huỳnh Đức	1972-05-20 00:00:00.000	NULL	HLV Chính	SHB ĐÀ NẴNG
2	HLV04	Hoàng Anh Tuấn	1970-06-10 00:00:00.000	NULL	HLV Chính	KHATOCO KHÁNH HÒA
3	HLV05	Trần Công Minh	1973-07-07 00:00:00.000	NULL	HLV Chính	GẠCH ĐỒNG TÂM LONG AN
4	HLV06	Trần Văn Phúc	1965-02-03 00:00:00.000	NULL	HLV thủ môn	BECAMEX BÌNH DƯƠNG

MACLB	TENCLB	TENSAN	DIACHI	SOCAUTHUNUOCNGOAI
-------	--------	--------	--------	-------------------

STT	Tên User	Thực thi câu select	Giải thích kết quả
1	BDBRead	EXEC SPCau1 'SHB Đà Nẵng', 'Brazil' EXEC SPCau9 3, 2009	Thực thi được do user được phép thực thi tất cả các stored procedure
2	BDU01	EXEC SPCau3 'Việt Nam' EXEC SPCau10 3, 2009	Thực thi được SPCau10 nhưng không được SPCau3 do user chỉ được phân quyền thực thi từ SPCau5=>SPCau10
3	BDU03	EXEC SPCau1 'SHB Đà Nẵng', 'Brazil' EXEC SPCau10 3, 2009 EXEC SPCau3 'Việt Nam' EXEC SPCau4 'Việt Nam'	Các stored procedure SPCau1, SPCau3, SPCau4 đều được thực thi trừ SPCau10 do user chỉ được phân quyền thực thi từ SPCau1=>SPCau4
4	BDU04	EXEC SPCau1 'SHB Đà Nẵng', 'Brazil' EXEC SPCau10 3, 2009 EXEC SPCau3 'Việt Nam' EXEC SPCau4 'Việt Nam'	Các stored procedure SPCau1, SPCau3, SPCau4 đều được thực thi trừ SPCau10 do user chỉ được phân quyền thực thi từ SPCau1=>SPCau4