

# Lab02 BMCSDL

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Tạo User:

## 1. BAdmin

The screenshot shows the 'Login Properties - BAdmin' dialog box with the 'General' tab selected. The 'Login name' is 'BAdmin'. Under 'Authentication', 'SQL Server authentication' is selected. The 'Password' and 'Confirm password' fields are filled with masked characters. There are checkboxes for 'Specify old password', 'Enforce password policy', 'Enforce password expiration', and 'User must change password at next login'. Under 'Mapped to certificate', 'Mapped to asymmetric key', and 'Map to Credential' are all unselected. The 'Mapped Credentials' table is empty. The 'Default database' is 'QLBongDa' and the 'Default language' is 'English - us\_english'. The 'Progress' section shows a 'Ready' status.

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BAdmin	dbo
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

The screenshot shows the 'Login Properties - BAdmin' dialog box with the 'User Mapping' tab selected. The 'Users mapped to this login' table is populated with the following data:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BAdmin	dbo
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

Below the table, there is a checkbox for 'Guest account enabled for: QLBongDa' which is unchecked. The 'Database role membership for: QLBongDa' section shows a list of roles with checkboxes:

- ☐ BDU01AddTable
- ☒ db\_accessadmin
- ☒ db\_backupoperator
- ☒ db\_datareader
- ☒ db\_datawriter
- ☒ db\_dtladmin
- ☐ db\_denydatareader
- ☐ db\_denydatawriter
- ☒ db\_owner
- ☒ db\_securityadmin
- ☒ public

2. BDBK

Login Properties - BDBK

Select a page

General

Server Roles

User Mapping

Securables

Status

Connection

Server:  
MINH-PC\MSSQLSERVER02

Connection:  
MINH-PC\vtmin

View connection properties

Progress

Ready

Script

Help

Login name:

BDBK

Search...

Windows authentication

SQL Server authentication

Password:

Confirm password:

Specify old password

Old password:

Enforce password policy

Enforce password expiration

User must change password at next login

Mapped to certificate

Mapped to asymmetric key

Map to Credential

Add

Mapped Credentials

Credential	Provider
------------	----------

Remove

Default database:

master

Default language:

English - us\_english

OK

Cancel

Login Properties - BDBK

Select a page

General

Server Roles

User Mapping

Securables

Status

Connection

Server:  
MINH-PC\MSSQLSERVER02

Connection:  
MINH-PC\vtmin

View connection properties

Progress

Ready

Script

Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BDBK	dbo
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

Guest account enabled for: QLBongDa

Database role membership for: QLBongDa

BDU01AddTable

db accessadmin

db backupoperator

db datareader

db datawriter

db ddladmin

db denydatareader

db denydatawriter

db owner

db securityadmin

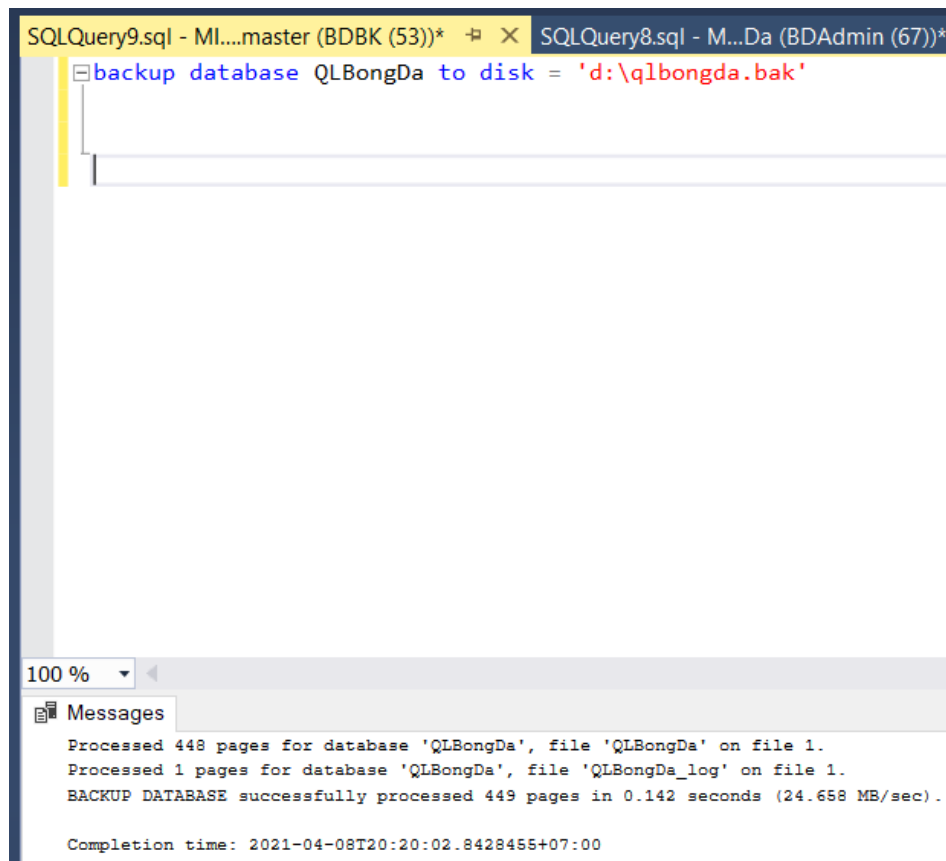
public

OK

Cancel

Script:

- Backup thành công

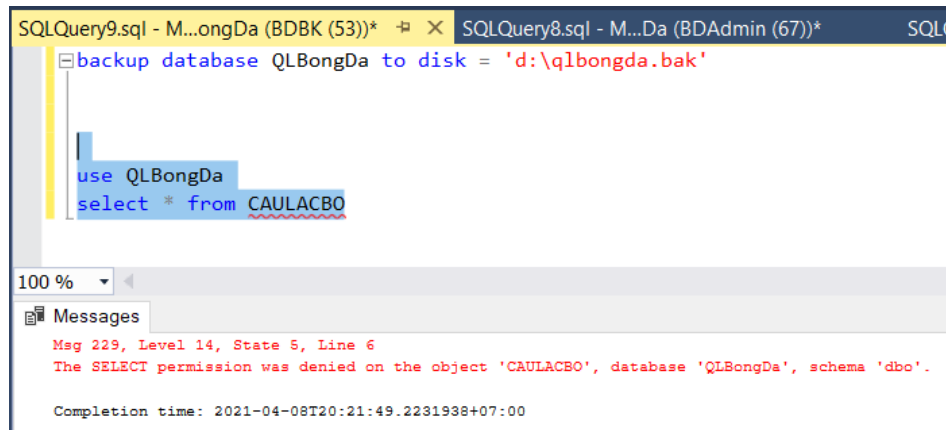


The screenshot shows the SQL Server Enterprise Manager interface. The top pane displays the SQL script: `backup database QL BongDa to disk = 'd:\ql bongda.bak'`. The bottom pane, titled 'Messages', shows the execution results: 'Processed 448 pages for database 'QL BongDa', file 'QL BongDa' on file 1. Processed 1 pages for database 'QL BongDa', file 'QL BongDa\_log' on file 1. BACKUP DATABASE successfully processed 449 pages in 0.142 seconds (24.658 MB/sec). Completion time: 2021-04-08T20:20:02.8428455+07:00'.

```
SQLQuery9.sql - Ml....master (BDBK (53))* SQLQuery8.sql - M...Da (BDAdmin (67))*
backup database QL BongDa to disk = 'd:\ql bongda.bak'

100 %
Messages
Processed 448 pages for database 'QL BongDa', file 'QL BongDa' on file 1.
Processed 1 pages for database 'QL BongDa', file 'QL BongDa_log' on file 1.
BACKUP DATABASE successfully processed 449 pages in 0.142 seconds (24.658 MB/sec) .
Completion time: 2021-04-08T20:20:02.8428455+07:00
```

- Select bị denied



The screenshot shows the SQL Server Enterprise Manager interface. The top pane displays the SQL script: `use QL BongDa` followed by `select * from CAULACBO`. The bottom pane, titled 'Messages', shows the error: 'Msg 229, Level 14, State 5, Line 6 The SELECT permission was denied on the object 'CAULACBO', database 'QL BongDa', schema 'dbo'. Completion time: 2021-04-08T20:21:49.2231938+07:00'.

```
SQLQuery9.sql - M...ongDa (BDBK (53))* SQLQuery8.sql - M...Da (BDAdmin (67))*
use QL BongDa
select * from CAULACBO

100 %
Messages
Msg 229, Level 14, State 5, Line 6
The SELECT permission was denied on the object 'CAULACBO', database 'QL BongDa', schema 'dbo'.
Completion time: 2021-04-08T20:21:49.2231938+07:00
```

3. BDRRead

Login Properties - BDRRead

Select a page

General

Server Roles

User Mapping

Securables

Status

Connection

Server:  
MINH-PC\MSSQLSERVER02

Connection:  
MINH-PC\ntmin

View connection properties

Progress

Ready

Script

Help

Login name:

BDRRead

Search...

Windows authentication

SQL Server authentication

Password:

Confirm password:

Specify old password

Old password:

Enforce password policy

Enforce password expiration

User must change password at next login

Mapped to certificate

Mapped to asymmetric key

Map to Credential

Mapped Credentials

Credential

Provider

Add

Remove

Default database:

master

Default language:

English - us\_english

OK

Cancel

Login Properties - BDRRead

Select a page

General

Server Roles

User Mapping

Securables

Status

Connection

Server:  
MINH-PC\MSSQLSERVER02

Connection:  
MINH-PC\ntmin

View connection properties

Progress

Ready

Script

Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BDRRead	dbo
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

☐ Guest account enabled for: QLBongDa

Database role membership for: QLBongDa

☐ BDU01AddTable

☐ db\_accessadmin

☐ db\_backupoperator

☒ db\_datareader

☐ db\_datawriter

☐ db\_ddladmin

☐ db\_denypdatareader

☐ db\_denypdatawriter

☐ db\_owner

☐ db\_securityadmin

☒ public

OK

Cancel

Script:

- Select thành công

SQLQuery11.sql -...ngDa (BDRRead (53))\*

```
use QLBongDa  
select * from CAULACBO
```

100 %

Results Messages

	MACLB	TENCLB	MASAN	MATINH
1	BBD	BECAMEX BÌNH DƯƠNG	GD	BD
2	GDT	GẠCH ĐỒNG TÂM LONG AN	LA	LA
3	HAGL	HOÀNG ANH GIA LAI	PL	GL
4	KKH	KHATOCO KHÁNH HÒA	NT	KH
5	SDN	SHB ĐÀ NẴNG	CL	DN
6	TPY	THÉP PHÚ YÊN	TH	PY

- Lệnh insert bị denied (thành công)

SQLQuery11.sql -...ngDa (BDRRead (53))\*

```
select * from CAULACBO  
insert into CAULACBO(MACLB,TENCLB,MASAN,MATINH)  
values('aaa','binh duong','aa','aa')
```

100 %

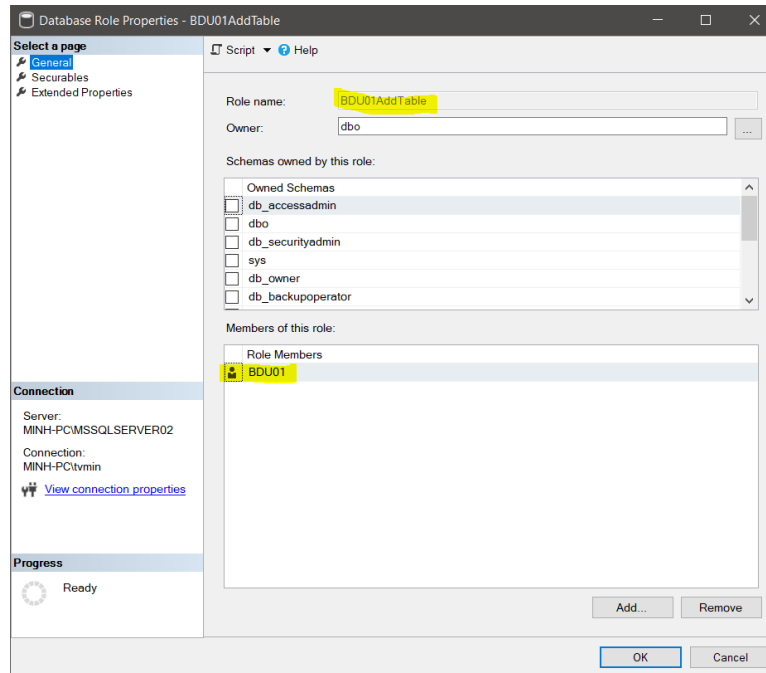
Messages

Msg 229, Level 14, State 5, Line 5  
The INSERT permission was denied on the object 'CAULACBO', database 'QLBongDa', schema 'dbo'.

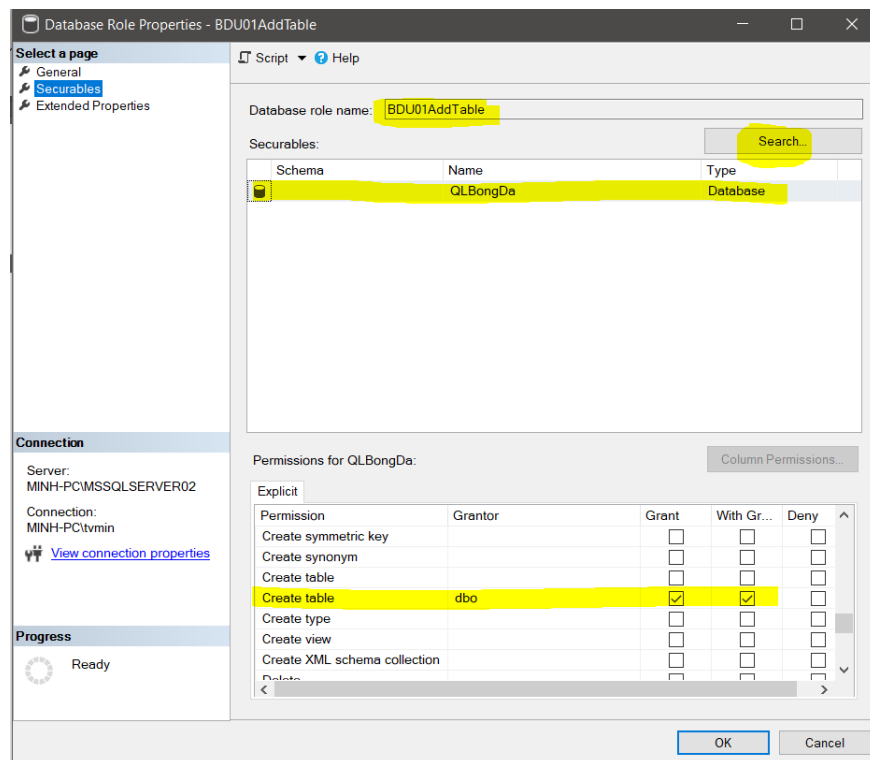
Completion time: 2021-04-08T20:27:19.9784260+07:00

#### 4. BDU01

Add role: QLBongDa > Security > Roles > New > New database roles



Search Database QLBongDa để thêm Role > Chọn Create table tại mục permissions for QLBongDa



## 5. BDU02

Login - New

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Login name: BDU02 Search...

☐ Windows authentication

☒ SQL Server authentication

Password: .....

Confirm password: .....

☐ Specify old password

Old password: .....

☐ Enforce password policy

☐ Enforce password expiration

☐ User must change password at next login

☐ Mapped to certificate

☐ Mapped to asymmetric key

☐ Map to Credential

Add

Mapped Credentials

Credential	Provider
------------	----------

Remove

Default database: master

Default language: <default>

OK Cancel

Login - New

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BDU02	
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

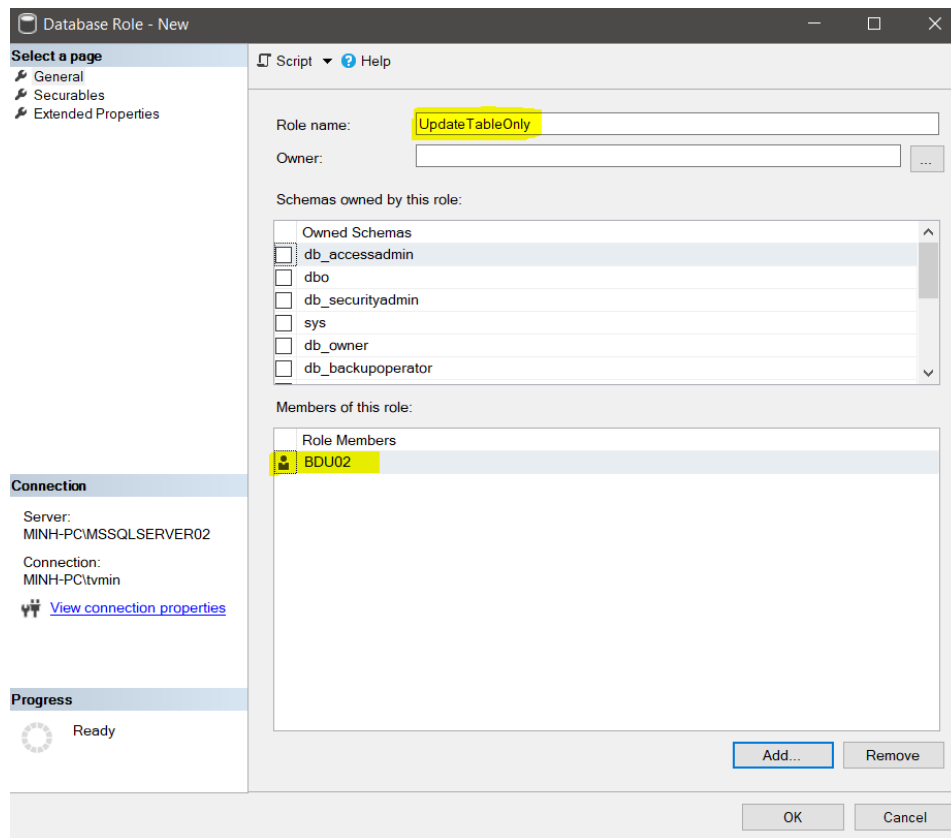
☐ Guest account enabled for: QLBongDa

Database role membership for: QLBongDa

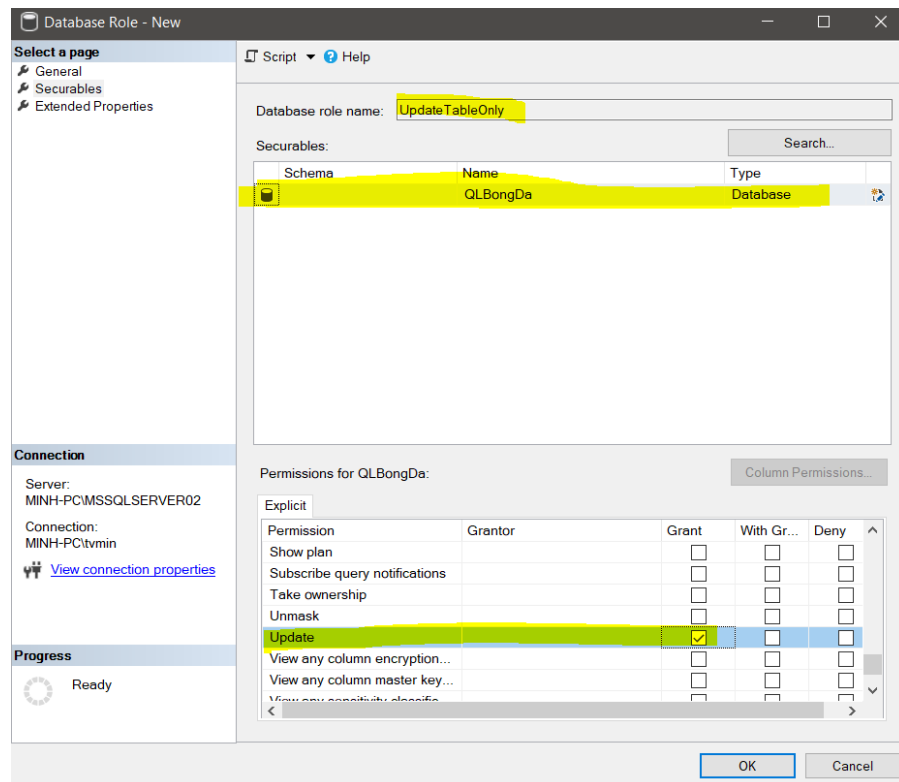
<input type="checkbox"/>	Create Table
<input type="checkbox"/>	db_accessadmin
<input type="checkbox"/>	db_backupoperator
<input type="checkbox"/>	db_datareader
<input type="checkbox"/>	db_datawriter
<input type="checkbox"/>	db_ddladmin
<input type="checkbox"/>	db_denydatareader
<input type="checkbox"/>	db_denydatawriter
<input type="checkbox"/>	db_owner
<input type="checkbox"/>	db_securityadmin
<input checked="" type="checkbox"/>	public

OK Cancel

Tạo role thêm BDU02 vào



Chọn database và chọn quyền update cho role (chọn thêm select để có thể check lại)





## Script

- Update thành công

```
SQLQuery15.sql -...ongDa (BDU02 (62))* X
```

```
use QLBongDa

update QUOCGIA
set TENQG = 'TEST'
where MAQG = 'VN'

select * from QUOCGIA
```

100 %

Results Messages

	MAQG	TENQG
1	ANH	Anh Quốc
2	BDN	Bồ Đào Nha
3	BRA	Brazil
4	ITA	Ý
5	TBN	Tây Ban Nha
6	THA	Thái Lan
7	VN	TEST

- Không thể thêm mới table(thành công)

```
SQLQuery15.sql -...ongDa (BDU02 (62))* X SQLQuery14
```

```
select * from QUOCGIA

CREATE TABLE a
(
    a VARCHAR(5),
    b NVARCHAR(100) NOT NULL,
    PRIMARY KEY(a)
)
go
```

100 %

Messages

Msg 262, Level 14, State 1, Line 10  
CREATE TABLE permission denied in database 'QLBongDa'.

Completion time: 2021-04-08T21:18:24.8914815+07:00

- Không thể xoá table (thành công)

```
SQLQuery15.sql -...ongDa (BDU02 (62))* SQLQuery14.sql -...ongDa (BDU01 (57))*
use QLBongDa

update QUOCGIA
set TENQG = 'TEST'
where MAQG = 'VN'

select * from QUOCGIA

drop table [dbo].[QUOCGIA]
```

100 %

Messages

Msg 3701, Level 14, State 20, Line 10  
Cannot drop the table 'QUOCGIA', because it does not exist or you do not have permission.

Completion time: 2021-04-08T21:20:06.0244177+07:00

## 6. BDU03

Tạo user

Login - New

Select a page

- General
- Server Roles
- User Mapping
- Securables
- Status

Script Help

Login name: BDU03 Search...

☐ Windows authentication

☒ SQL Server authentication

Password: Password

Confirm password: Password

☐ Specify old password

Old password: Old password

☐ Enforce password policy

☐ Enforce password expiration

☐ User must change password at next login

☐ Mapped to certificate

☐ Mapped to asymmetric key

☐ Map to Credential

Add

Mapped Credentials

Credential	Provider
------------	----------

Remove

Default database: master

Default language: <default>

OK Cancel

Connection

Server: MINH-PC\MSSQLSERVER02

Connection: MINH-PC\itmin

View connection properties

Progress

Ready

Login - New

Select a page

General

Server Roles

User Mapping

Securables

Status

Script

Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BDU03	
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

☐ Guest account enabled for: QLBongDa

Database role membership for: QLBongDa

☐ CreateTable

☐ db\_accessadmin

☐ db\_backupoperator

☐ db\_datareader

☐ db\_datawriter

☐ db\_ddladmin

☐ db\_denydatareader

☐ db\_denydatawriter

☐ db\_owner

☐ db\_securityadmin

☒ public

☐ UpdateTableOnly

Progress

Ready

OK

Cancel

Tạo role

Login - New

Select a page

General

Server Roles

User Mapping

Securables

Status

Script

Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BDU03	
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

☐ Guest account enabled for: QLBongDa

Database role membership for: QLBongDa

☐ CreateTable

☐ db\_accessadmin

☐ db\_backupoperator

☐ db\_datareader

☐ db\_datawriter

☐ db\_ddladmin

☐ db\_denydatareader

☐ db\_denydatawriter

☐ db\_owner

☐ db\_securityadmin

☒ public

☐ UpdateTableOnly

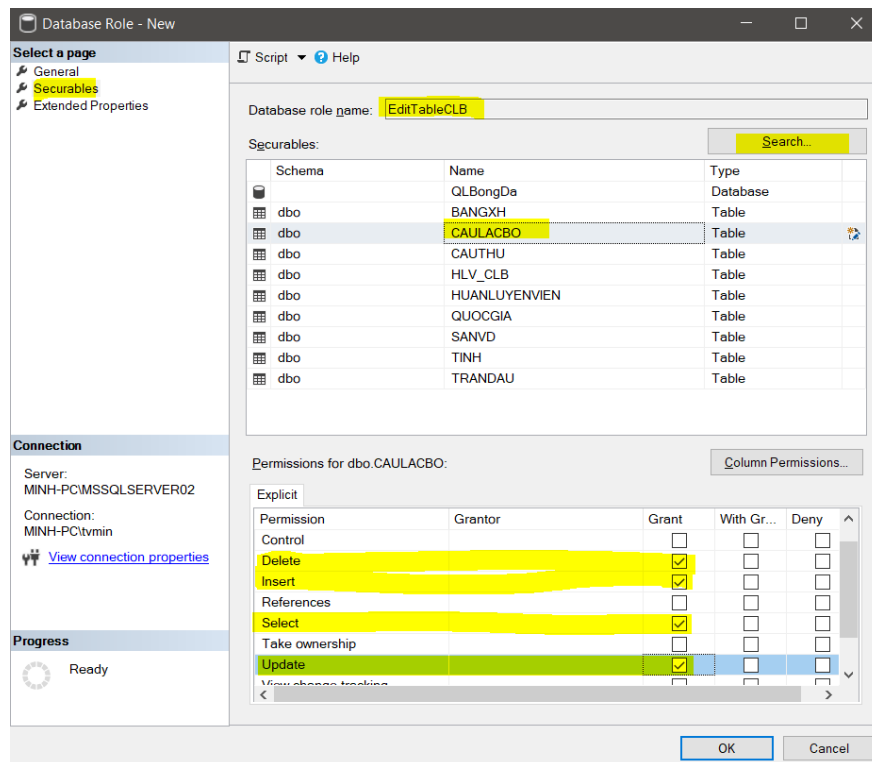
Progress

Ready

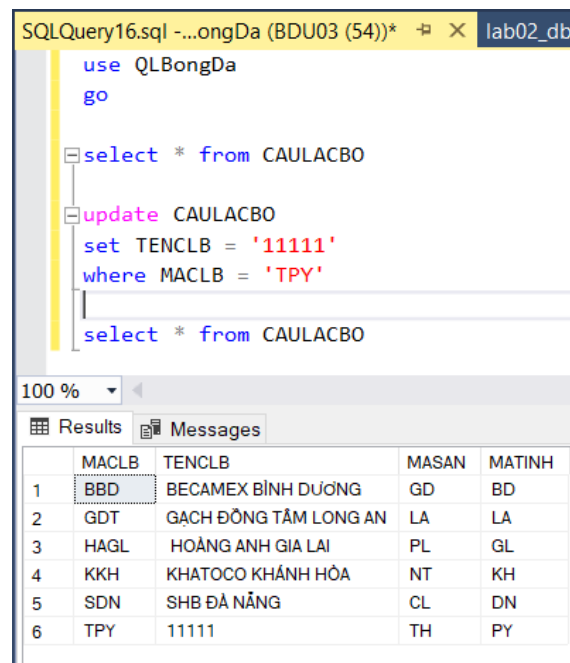
OK

Cancel

Search table > chọn bảng CAULACBO > Chọn các role (delete, insert, update, select)



Script



- Lệnh insert không bị denied (thành công)

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

```
use QLBongDa
go

select * from CAULACBO

insert into CAULACBO(MACLB,TENCLB,MASAN,MATINH)
values('TPD','11111','11','11')
```

Below the query window, the Messages pane displays the following error message:

```
Msg 547, Level 16, State 0, Line 5
The INSERT statement conflicted with the FOREIGN KEY constraint "FK_CLB_SANVD".
The statement has been terminated.

Completion time: 2021-04-08T21:35:11.3467534+07:00
```

- Các thao tác trên bảng khác bị denied

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

```
use QLBongDa
go

select * from HLV_CLB
```

Below the query window, the Messages pane displays the following error message:

```
Msg 229, Level 14, State 5, Line 4
The SELECT permission was denied on the object 'HLV_CLB',

Completion time: 2021-04-08T21:36:18.7863078+07:00
```

## 7. BDU04

Tạo user

**Login - New**

Select a page: General, Server Roles, User Mapping, Securables, Status

Script Help

Login name: BDU04 Search...

☐ Windows authentication  
☒ SQL Server authentication

Password: .....  
Confirm password: .....  
☐ Specify old password  
Old password: .....

☐ Enforce password policy  
☐ Enforce password expiration  
☐ User must change password at next login

☐ Mapped to certificate  
☐ Mapped to asymmetric key  
☐ Map to Credential Add

Mapped Credentials

Credential	Provider
------------	----------

Remove

Default database: master  
Default language: <default>

OK Cancel

**Connection**

Server: MINH-PC\MSSQLSERVER02  
Connection: MINH-PC\ntmin  
[View connection properties](#)

**Progress**

Ready

**Login - New**

Select a page: General, Server Roles, User Mapping, Securables, Status

Script Help

Users mapped to this login:

Map	Database	User	Default Schema
<input type="checkbox"/>	master		
<input type="checkbox"/>	model		
<input type="checkbox"/>	msdb		
<input checked="" type="checkbox"/>	QLBongDa	BDU04	
<input type="checkbox"/>	tempdb		
<input type="checkbox"/>	TEST DB		

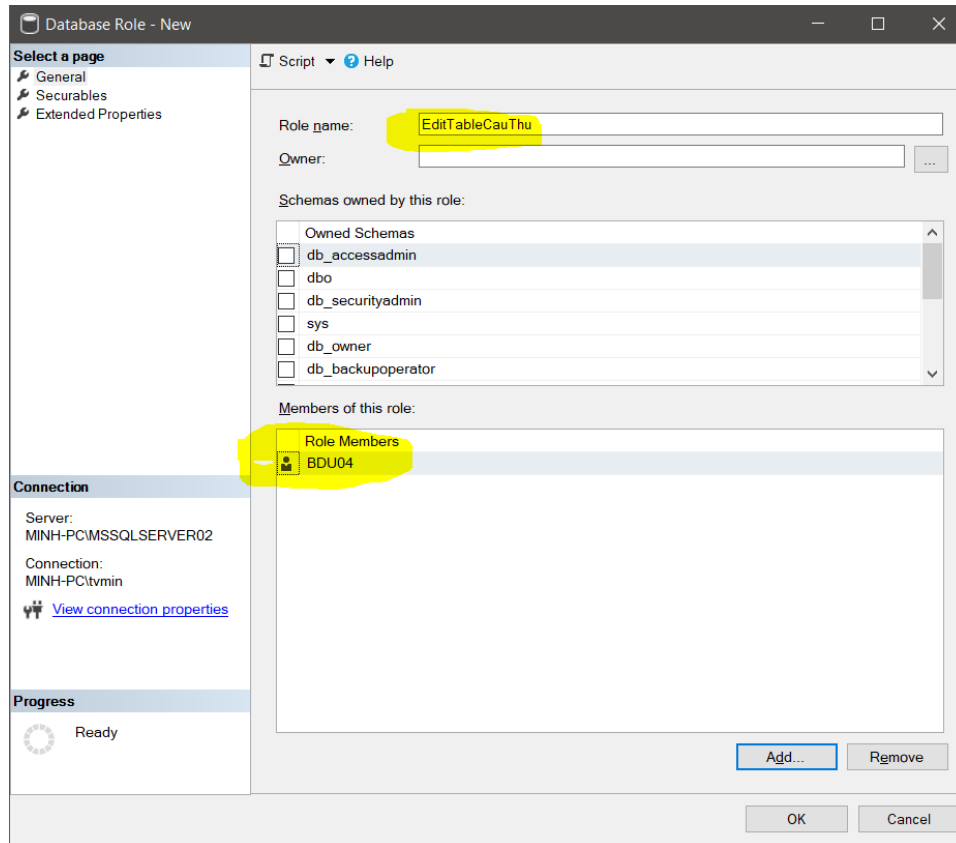
☐ Guest account enabled for: QLBongDa

Database role membership for: QLBongDa

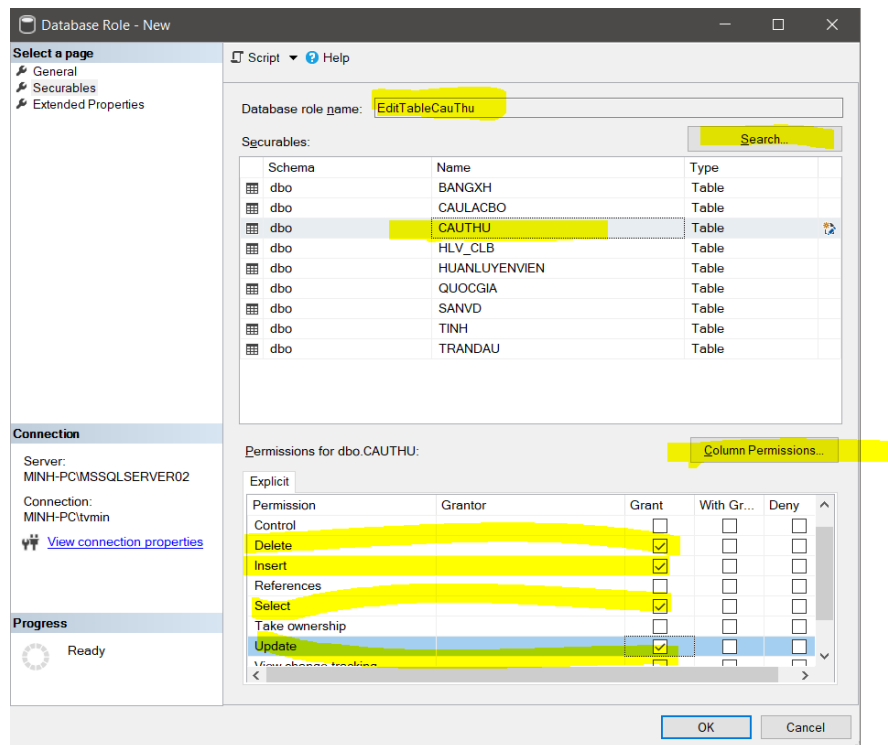
- ☐ CreateTable
- ☐ db\_accessadmin
- ☐ db\_backupoperator
- ☐ db\_datareader
- ☐ db\_datawriter
- ☐ db\_denydatareader
- ☐ db\_denydatawriter
- ☐ db\_owner
- ☐ db\_securityadmin
- ☐ EditTableCLB
- ☒ public

OK Cancel

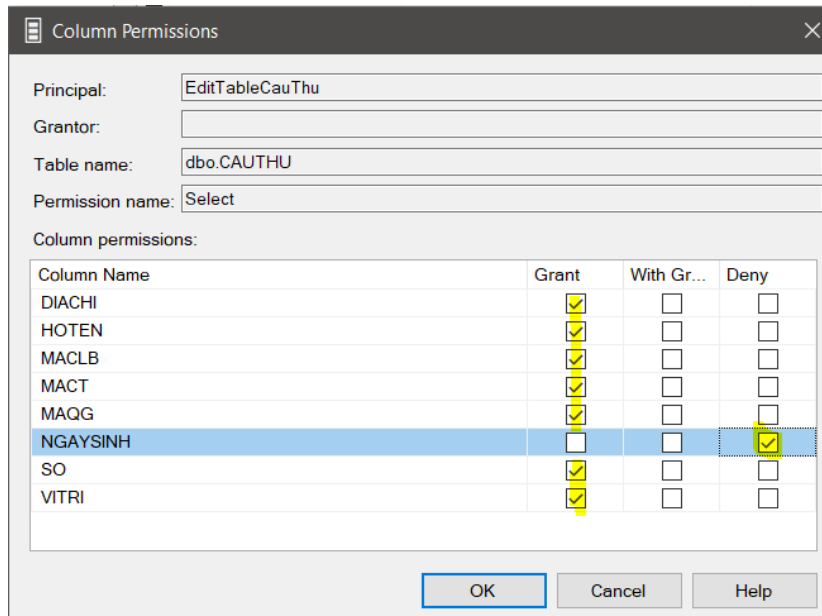
## Tạo Role



Search table > table CAUTHU > thêm các quyền select, insert, delete, update



Với **Select** chọn **Column Permissions** > không cho xem cột ngày sinh



Principal: EditTableCauThu

Grantor:

Table name: dbo.CAUTHU

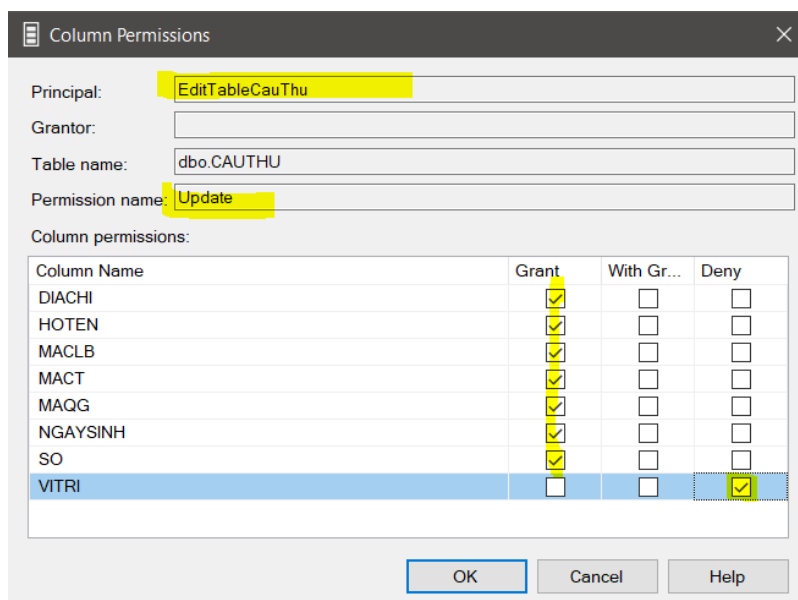
Permission name: Select

Column permissions:

Column Name	Grant	With Gr...	Deny
DIACHI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HOTEN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MACLB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MAQG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NGAYSINH	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VITRI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK Cancel Help

Với **Update** chọn **Column Permissions** > không cho chỉnh sửa giá trị cột vị trí



Principal: EditTableCauThu

Grantor:

Table name: dbo.CAUTHU

Permission name: Update

Column permissions:

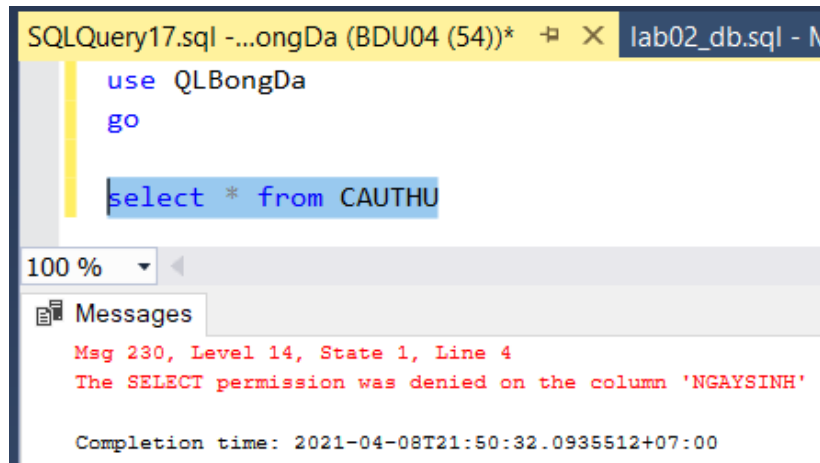
Column Name	Grant	With Gr...	Deny
DIACHI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HOTEN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MACLB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MAQG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NGAYSINH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VITRI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OK Cancel Help



Script:

- Ngăn chặn xem cột NGAYSINH thành công



The screenshot shows a SQL query window titled 'SQLQuery17.sql - ...ongDa (BDU04 (54))\*' with a tab for 'lab02\_db.sql'. The query text is:

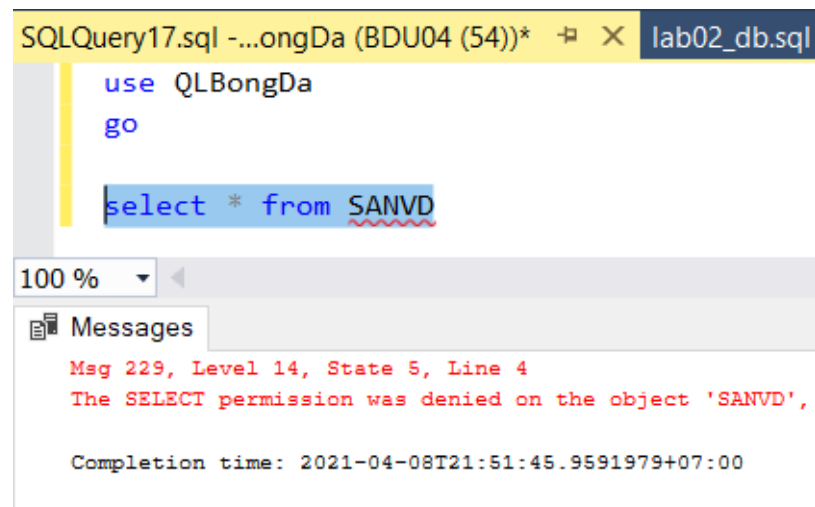
```
use QLBongDa
go
select * from CAUTHU
```

The query is executed at 100% zoom. The 'Messages' pane shows the following error:

```
Msg 230, Level 14, State 1, Line 4
The SELECT permission was denied on the column 'NGAYSINH'.
```

The completion time is 2021-04-08T21:50:32.0935512+07:00.

- Không thể xem các bảng khác (thành công)



The screenshot shows a SQL query window titled 'SQLQuery17.sql - ...ongDa (BDU04 (54))\*' with a tab for 'lab02\_db.sql'. The query text is:

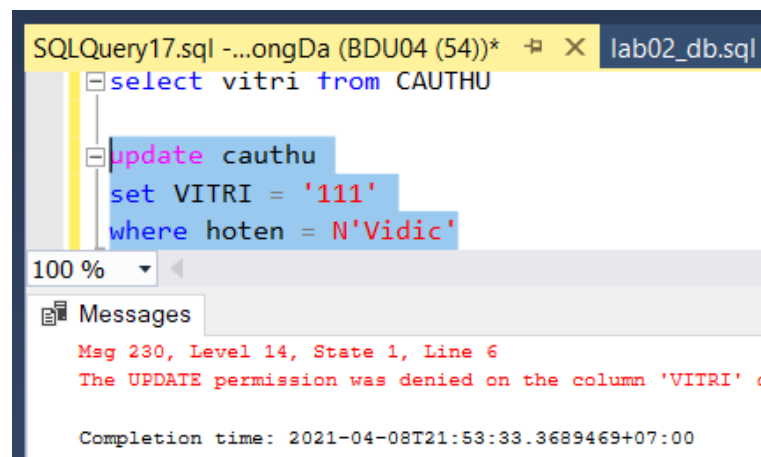
```
use QLBongDa
go
select * from SANVD
```

The query is executed at 100% zoom. The 'Messages' pane shows the following error:

```
Msg 229, Level 14, State 5, Line 4
The SELECT permission was denied on the object 'SANVD',
```

The completion time is 2021-04-08T21:51:45.9591979+07:00.

- Ngăn chặn việc sửa đổi vị trí thành công



The screenshot shows a SQL query window titled 'SQLQuery17.sql - ...ongDa (BDU04 (54))\*' with a tab for 'lab02\_db.sql'. The query text is:

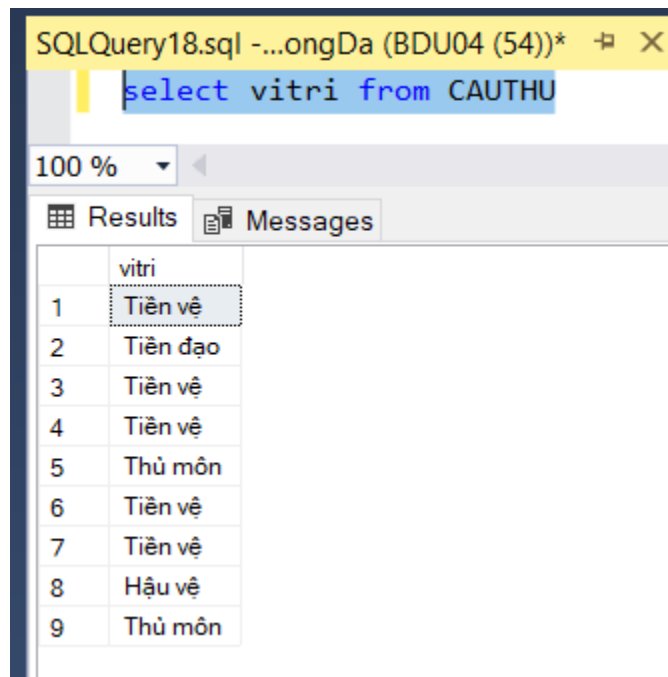
```
select vitri from CAUTHU
update cauthu
set VITRI = '111'
where hoten = N'Vidic'
```

The query is executed at 100% zoom. The 'Messages' pane shows the following error:

```
Msg 230, Level 14, State 1, Line 6
The UPDATE permission was denied on the column 'VITRI'.
```

The completion time is 2021-04-08T21:53:33.3689469+07:00.

- Các thao tác còn lại hoạt động bình thường



The screenshot shows a SQL query window with the following text:

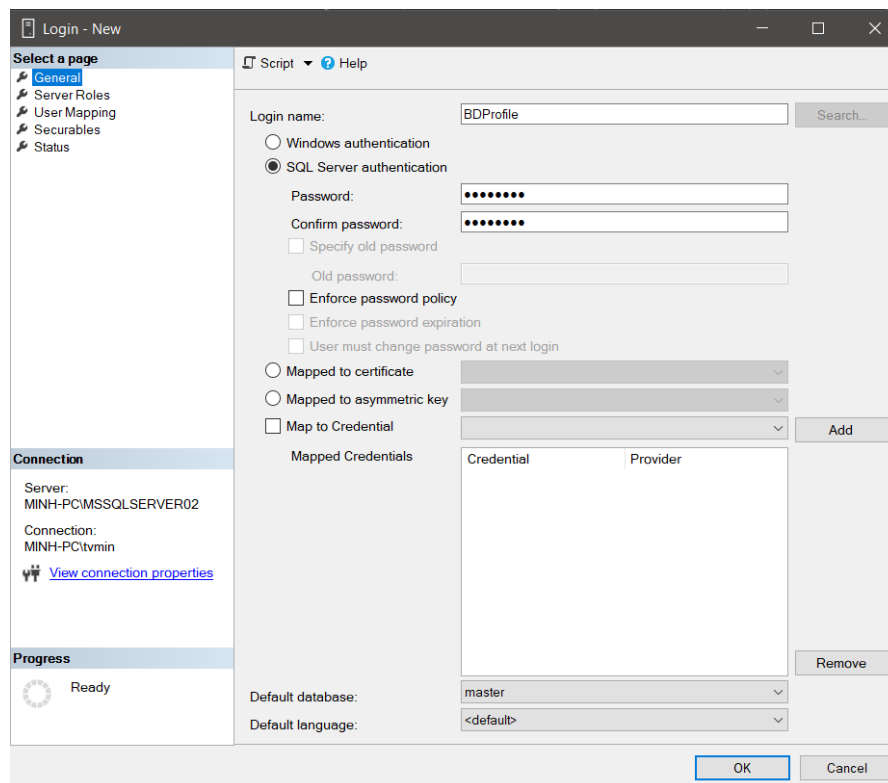
```
SQLQuery18.sql - ...ongDa (BDU04 (54))*  
select vitri from CAUTHU
```

The query results are displayed in a table with the following data:

	vitri
1	Tiền vệ
2	Tiền đạo
3	Tiền vệ
4	Tiền vệ
5	Thủ môn
6	Tiền vệ
7	Tiền vệ
8	Hậu vệ
9	Thủ môn

## 8. BDProfile

Tạo user

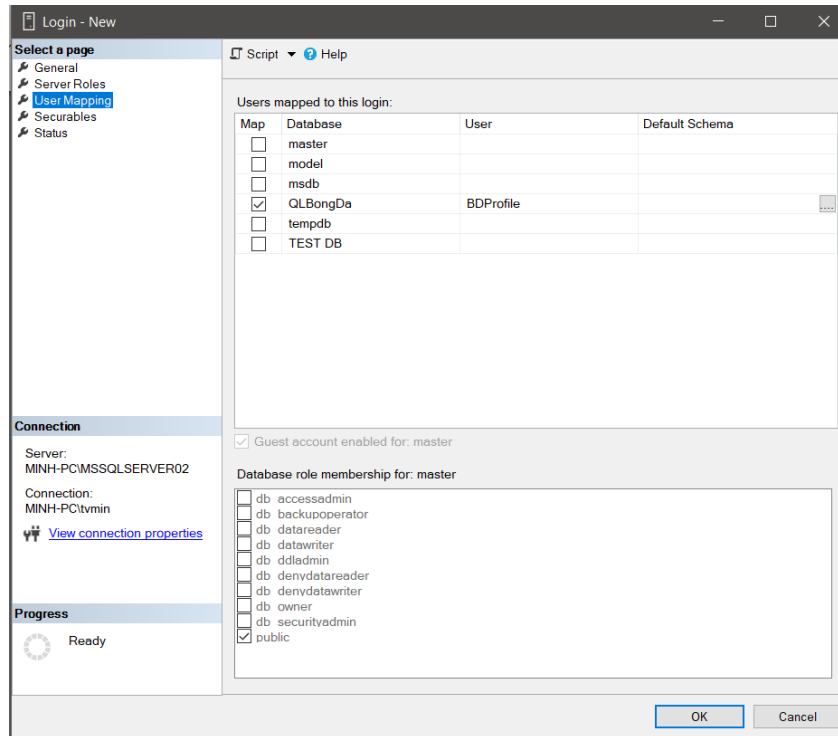


The screenshot shows the 'Login - New' dialog box with the following fields and options:

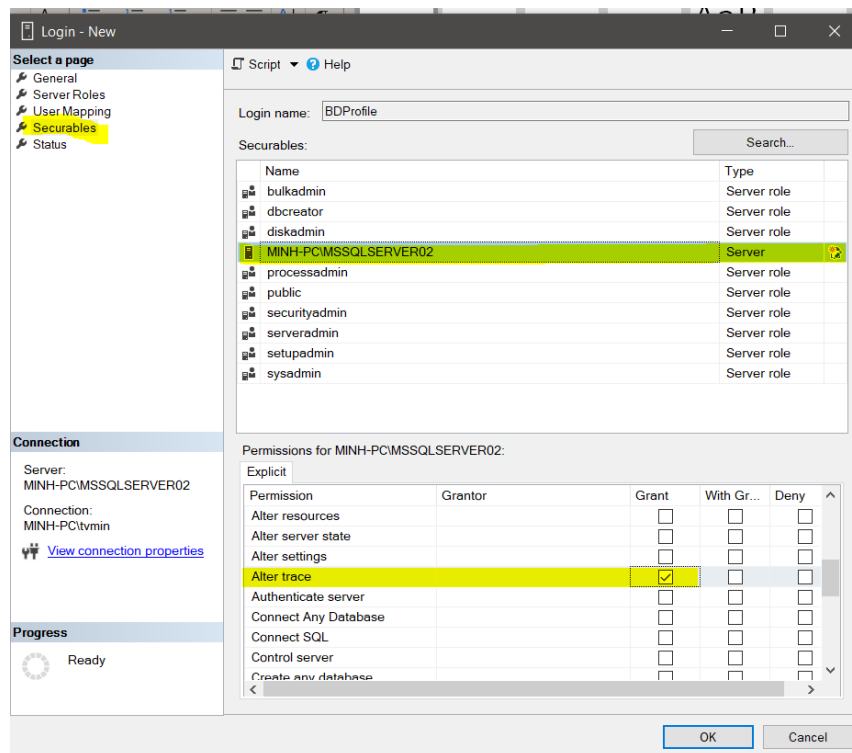
- Login name:** BDProfile
- Authentication:** ☒ SQL Server authentication
- Password:** [masked]
- Confirm password:** [masked]
- Specify old password:** ☐
- Old password:** [empty]
- Enforce password policy:** ☐
- Enforce password expiration:** ☐
- User must change password at next login:** ☐
- Mapped to certificate:** [empty]
- Mapped to asymmetric key:** [empty]
- Map to Credential:** ☐
- Mapped Credentials:** [empty table with columns Credential and Provider]
- Default database:** master
- Default language:** <default>

The 'Connection' section on the left shows the server name 'MINH-PC\MSSQLSERVER02' and the connection name 'MINH-PC\lmin'. The 'Progress' section shows a 'Ready' status.

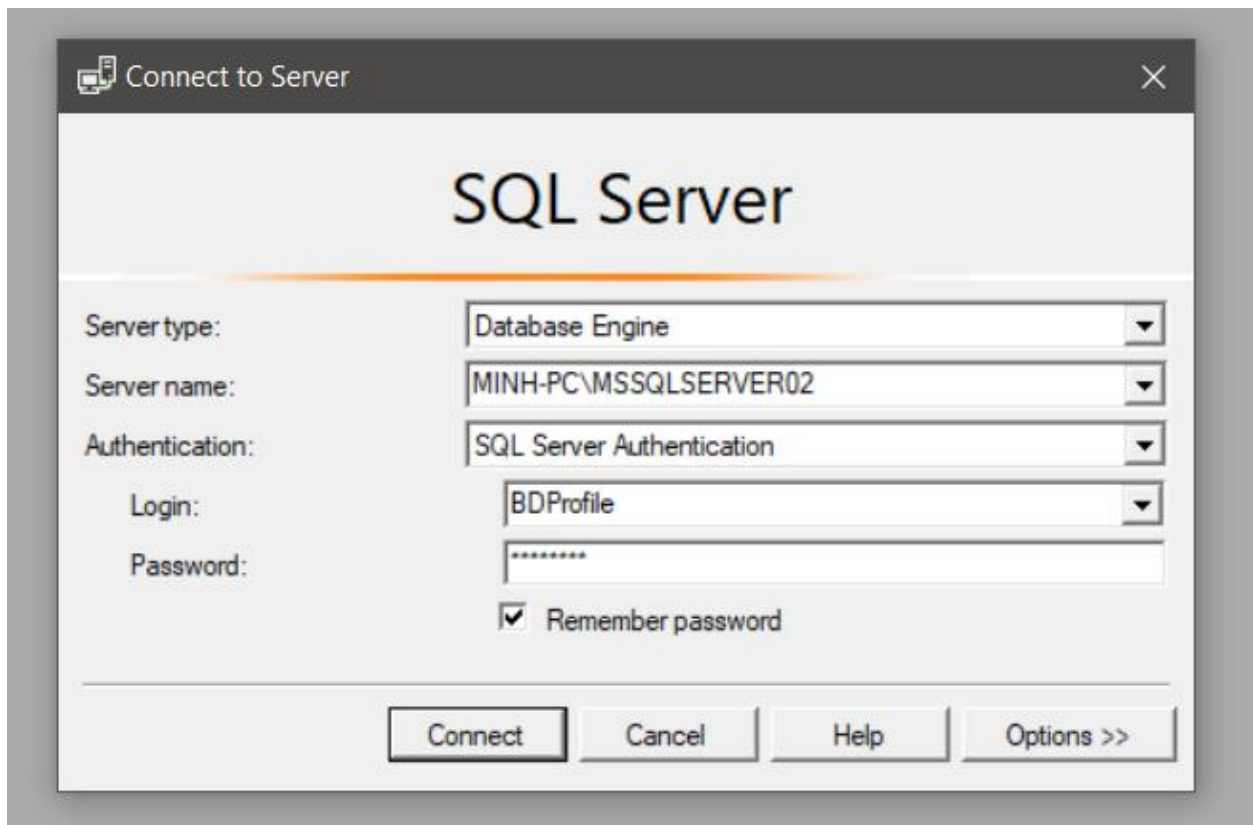
## Mapping với database



Securables > chọn Search server > tick vào alter trace



Kiểm tra: Tool > SQL Server Profiler > đăng nhập



Đăng nhập thành công

