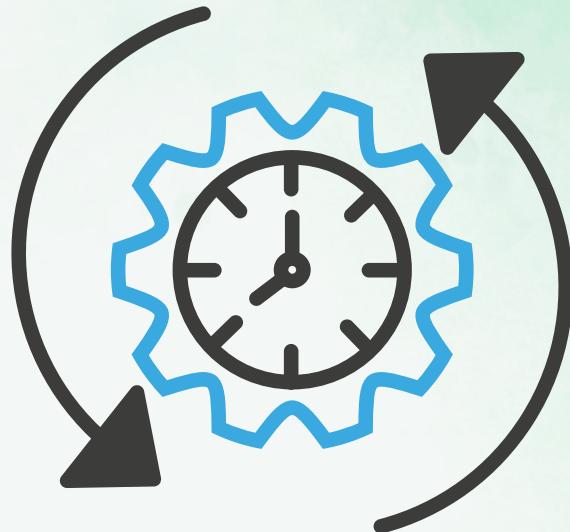




FIT@HCMUS

TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN, ĐHQG - HCM
KHOA CÔNG NGHỆ THÔNG TIN



LAB 2 - PHÂN QUYỀN TRUY CẬP CÁC ĐỐI TƯỢNG TRONG CSDL

BỘ MÔN: BẢO MẬT CƠ SỞ DỮ LIỆU

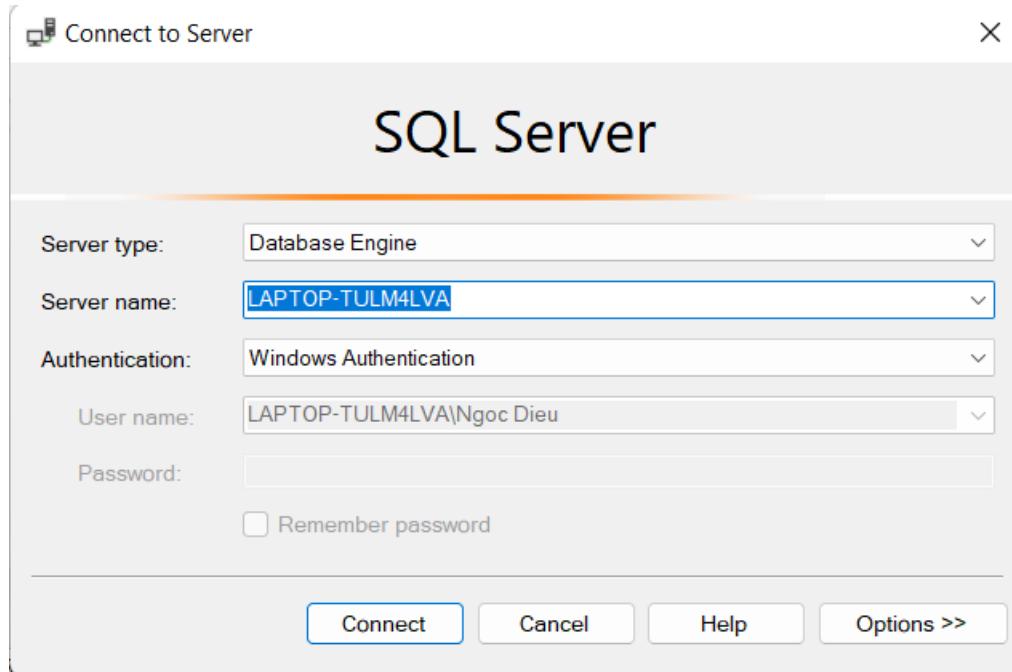
Sinh viên thực hiện:
21120419 - Vũ Thành Công

TP. Hồ Chí Minh, tháng 4/2024

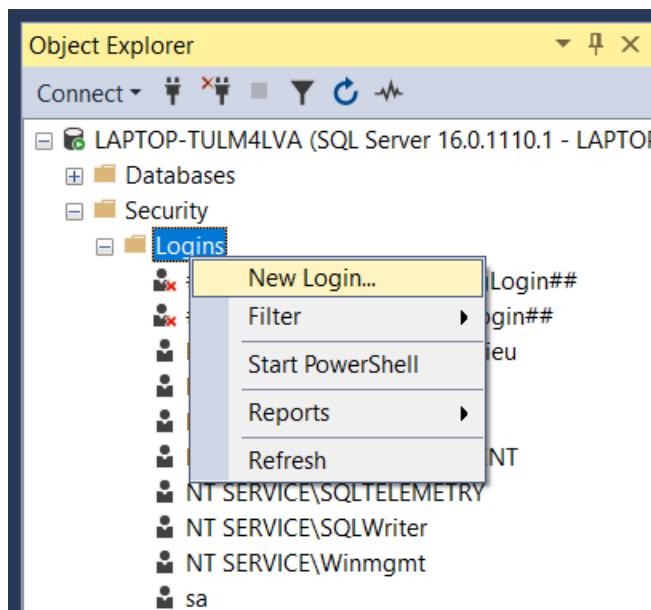
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Trước hết, cần Login bằng tài khoản Windows Authentication hoặc SQL Server Authentication (nhưng phải có toàn quyền như Windows Authentication)



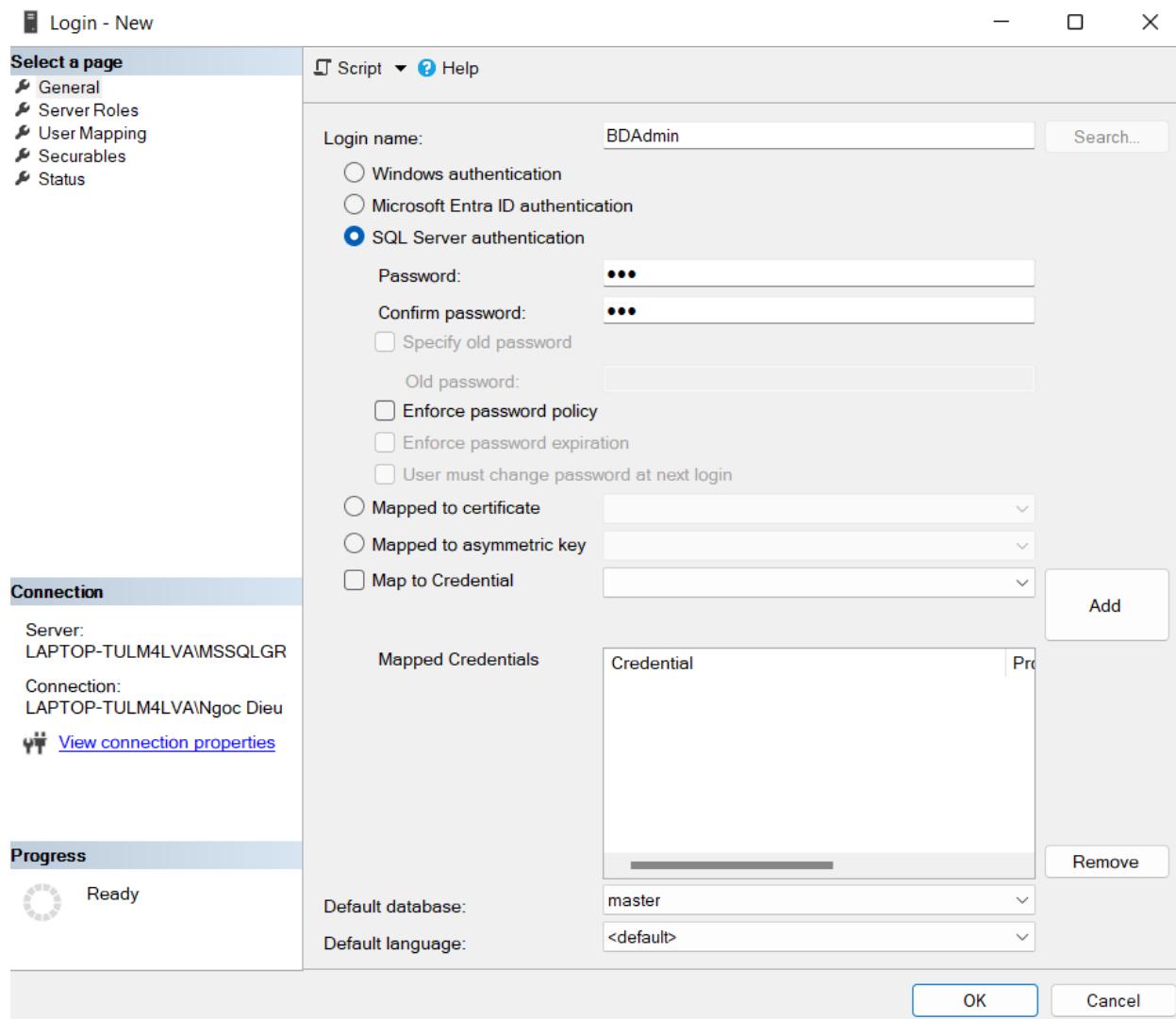
Vào **Security => Logins => New users** để bắt đầu thêm các user mới.



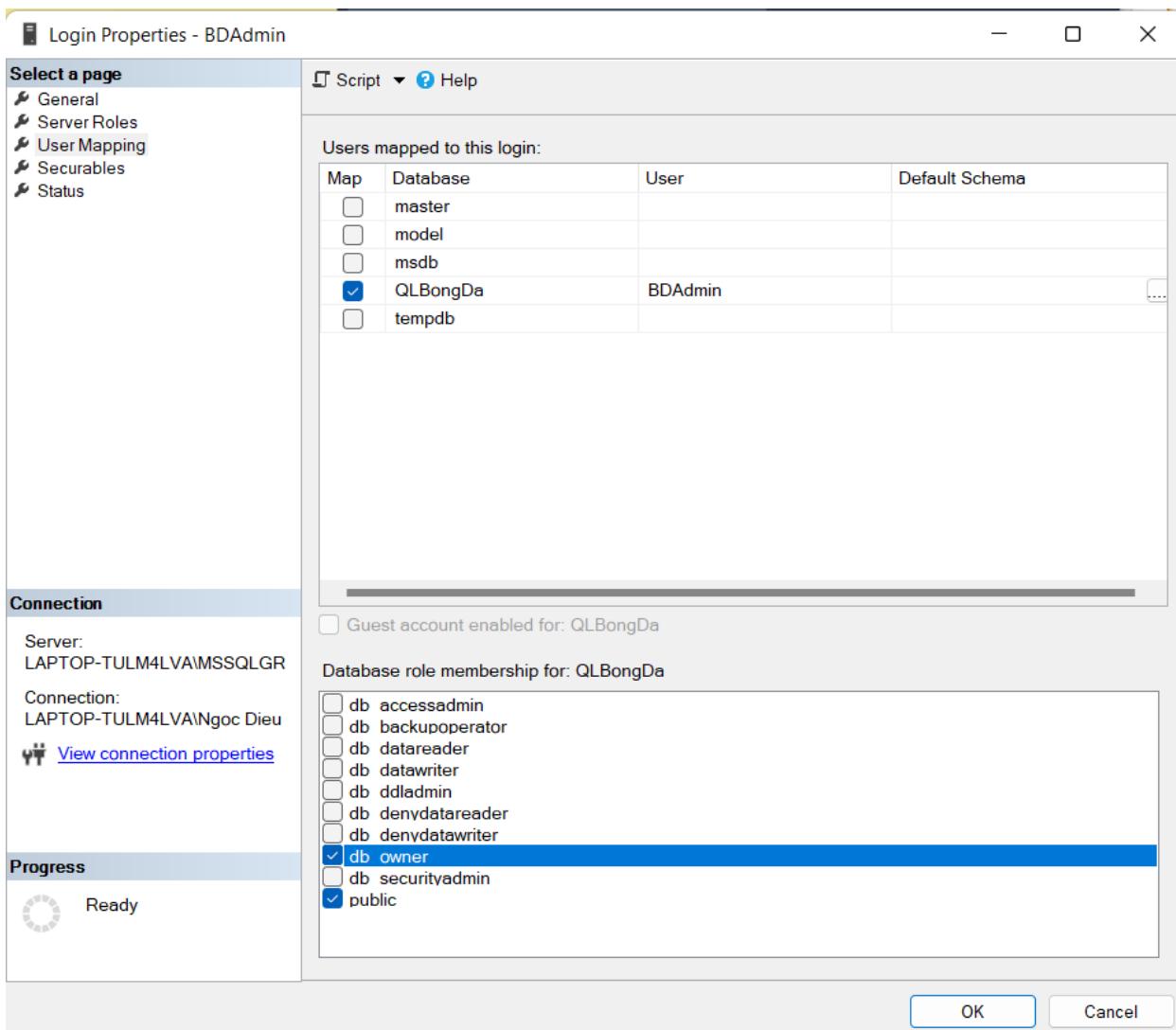
1. BDAdmin

1.1. Cài đặt

B1: Tạo user mới với loại ủy quyền là SQL Server Authentication



B2: Nháy đúp vô phần user BDAdmin, chọn User Mapping, map với database QLBongDa với role db owner và public



1.2. Kiểm tra

```

1 USE QLBongDa
2
3 --Test BDAdmin-
4 select* from CAUTHU
5
6 select* from TINH
7
8 insert into TINH(MATINH, TENTINH)
9 values
10 ('LD', 'Lam Dong')
11
12

```

MACT	HOTEN	VITRI	NGAYSINH	DIACHI	MACLB	MAQG	SO
1	Nguyễn Vũ Phong	Tân vđ	1990-02-20 00:00:00.000	NULL	BBD	VN	17
2	Nguyễn Công Vinh	Tânداء	1992-03-10 00:00:00.000	NULL	HAGL	VN	9
3	Trần Tân Tài	Tân vđ	1989-11-10 00:00:00.000	NULL	BBD	VN	8
4	Phạm Hồng Sơn	Thủ mòn	1991-06-10 00:00:00.000	NULL	HAGL	VN	1
5	Ronaldo	Tân vđ	1989-12-12 00:00:00.000	NULL	SDR	BRA	7
6	Robinho	Tân vđ	1989-10-12 00:00:00.000	NULL	SDR	BRA	8
7	Vidic	Hàu vđ	1987-10-15 00:00:00.000	NULL	HAGL	ANH	3
8	Trần Văn Santos	Thủ mòn	1990-10-21 00:00:00.000	NULL	BBD	BRA	1

Query executed successfully.

```

1 USE QLBongDa
2
3 --Test BDAdmin-
4 select* from CAUTHU
5
6 select* from TINH
7
8 insert into TINH(MATINH, TENTINH)
9 values
10 ('LD', 'Lam Dong')
11
12

```

(1 row affected)

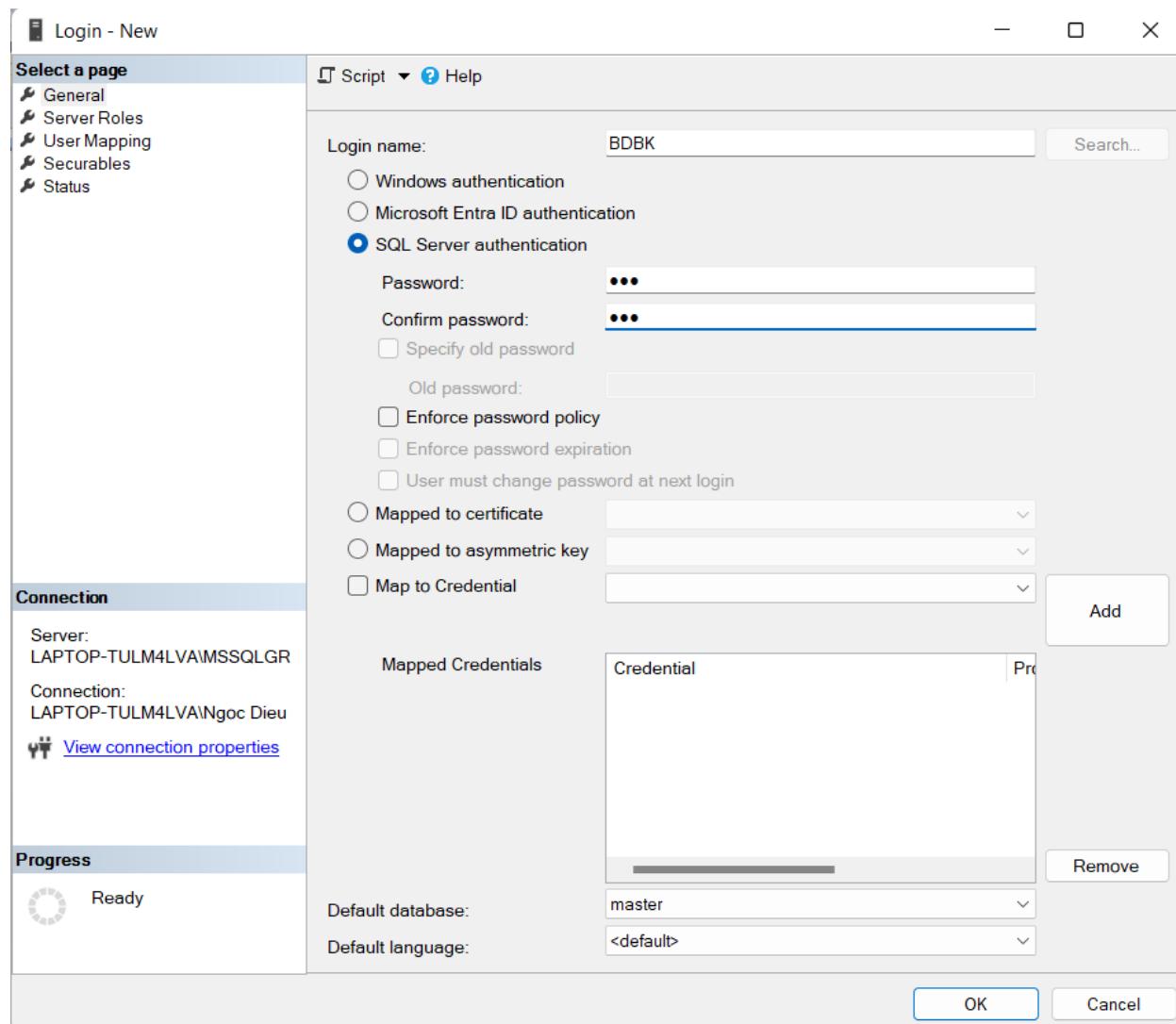
Completion time: 2024-04-12T22:16:30.4636851+07:00

Query executed successfully.

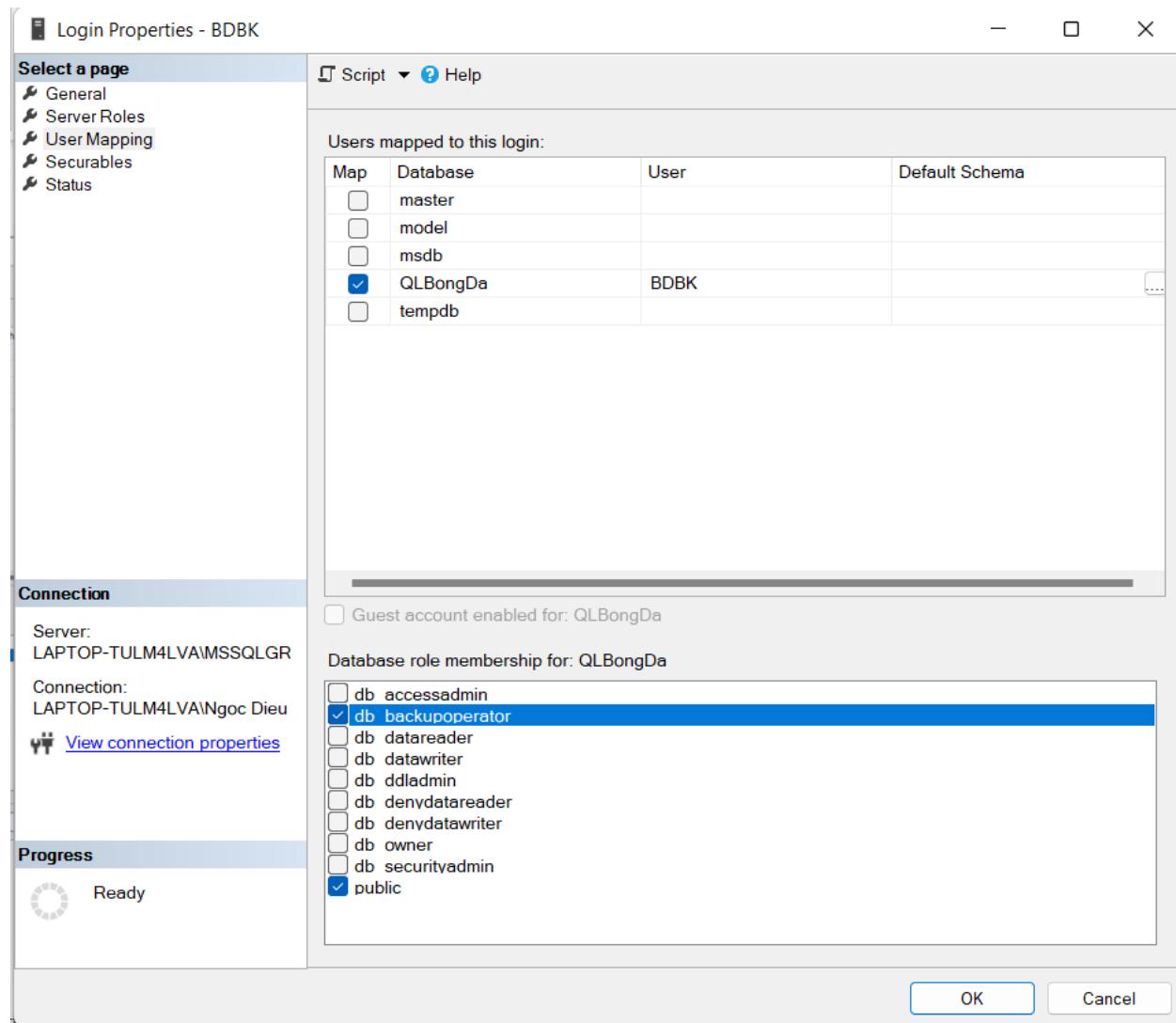
2. BDBK

2.1. Cài đặt

B1: Tạo user mới với loại ủy quyền là **SQL Server Authentication**



B2: Nháy đúp vô phần **user BDBK**, chọn **User Mapping**, map với database **QLBongDa** với role **db backupoperator** và **public**



2.2. Kiểm tra

```

5
6 select* from TINH
7
8 insert into TINH(MATINH, TENTINH)
9 values
10 ('LD', 'Lam Dong')
11
12 --Test BDBK--
13 backup database QLBongDa
14 to disk = 'C:\LAB2\QLBongDa.bak'
15 with noformat, noinit, name=N'QLBongDa-Full Database Backup', skip, norewind, nounload, stats = 10
16 go
17

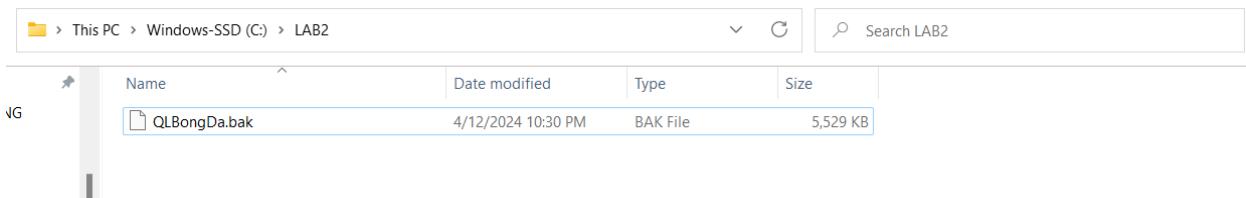
```

Messages

10 percent processed.
20 percent processed.
30 percent processed.
40 percent processed.
50 percent processed.
60 percent processed.
70 percent processed.
80 percent processed.
90 percent processed.
100 percent processed.
Processed 480 pages for database 'QLBongDa', file 'QLBongDa' on file 1.
Processed 1 pages for database 'QLBongDa', file 'QLBongDa_log' on file 1.
BACKUP DATABASE successfully processed 481 pages in 0.050 Seconds (177.132 MB/sec).

Completion time: 2024-04-12T22:30:51.1734869+07:00

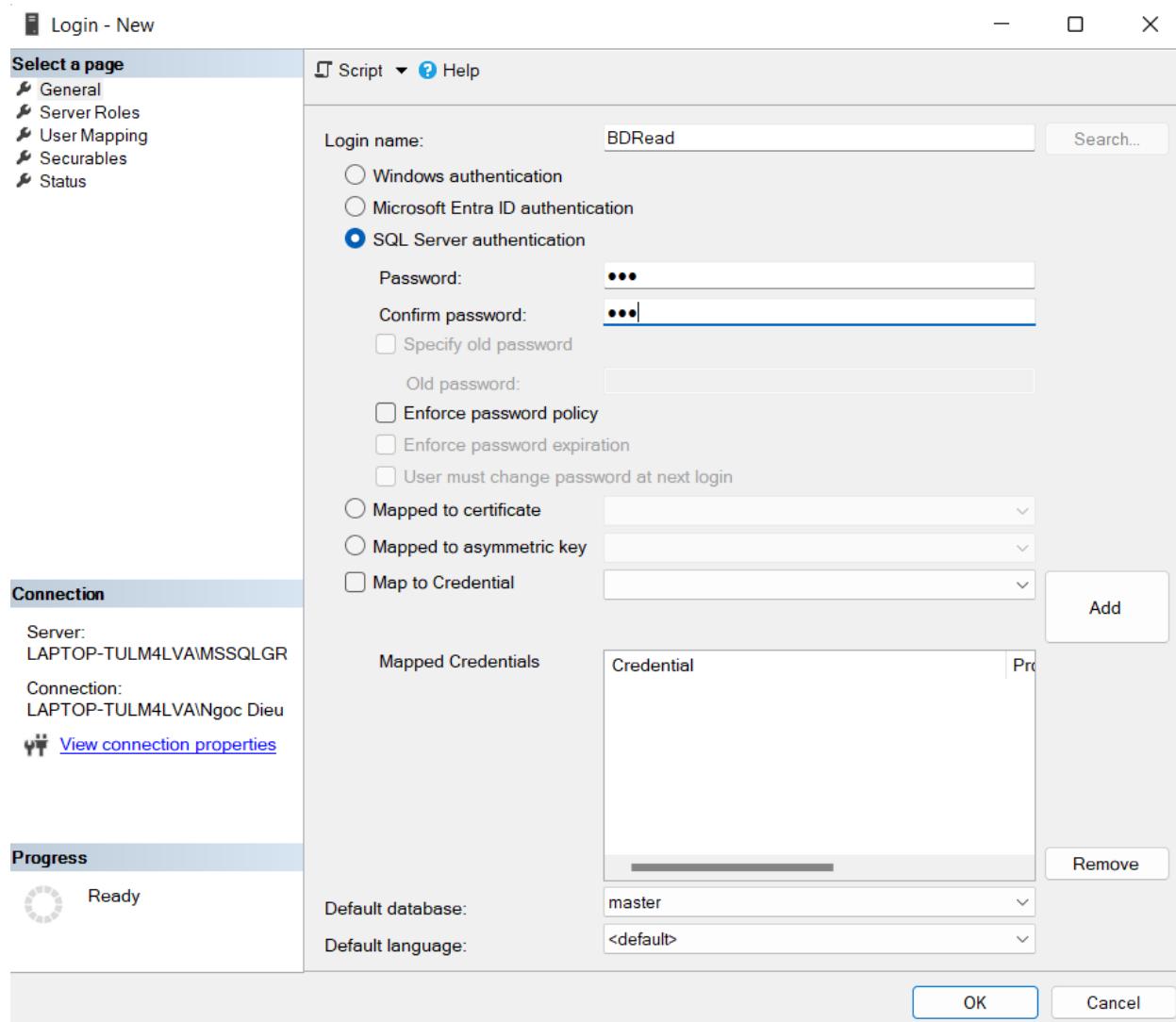
Query executed successfully.



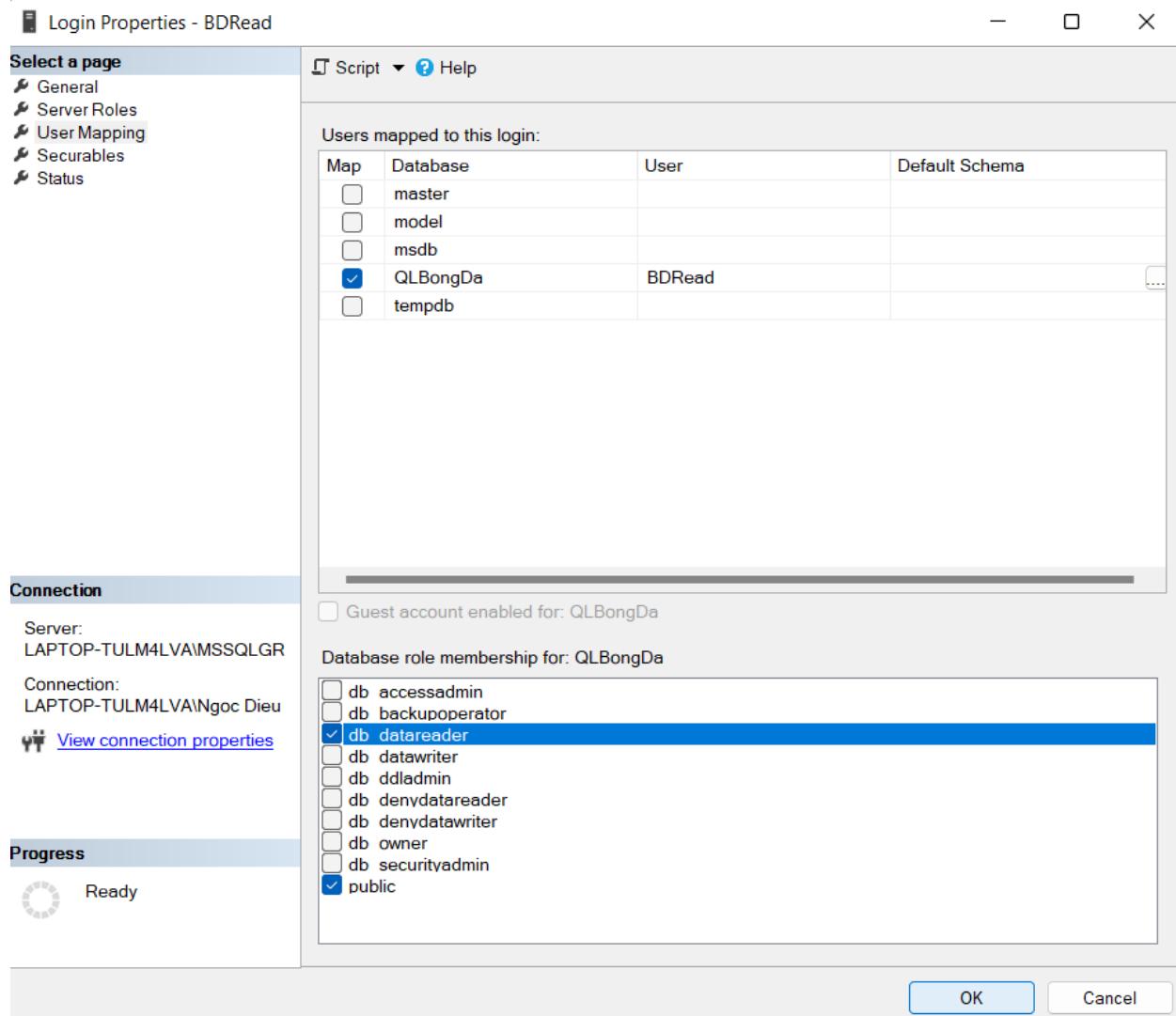
3. BDRead

3.1. Cài đặt

B1: Tạo user mới với loại ủy quyền là SQL Server Authentication



B2: Nháy đúp vô phần user BDRead, chọn User Mapping, map với database QLBongDa với role db datareader và public



3.2. Kiểm tra

```

13  --Backup database QLBongDa
14  to disk = 'C:\LAB2\QLBongDa.bak'
15  with noformat, noinit, name='N'QLBongDa-Full Database Backup', skip, norewind, nounload, stats = 10
16  go
17
18  --Test BDRead--
19  select* from CAULACBO
20
21  select* from QUOCGIA
22
23  insert into TINH(MATINH, TENTINH)
24  values
25  ('NT', 'Nha Trang')
26
27  update CAULACBO set MACLB = 'HAGL'

```

Results grid: Messages

MACLB	TENCLB	MASAN	MATINH
BD	BECAMEX BÌNH DƯƠNG	GD	BD
GDT	GẠCH ĐÓNG TÂM LONG AN	LA	LA
HAGL	HOÀNG ANH GIA LAI	PL	GL
KHH	KHATOCO KHÁNH HÒA	NT	KH
SDN	SHB SÀ NẴNG	CL	DN
TPY	THÉP PHÚ YÊN	TH	PY

Query executed successfully.

```

13  --Backup database QLBongDa
14  to disk = 'C:\LAB2\QLBongDa.bak'
15  with noformat, noinit, name='N'QLBongDa-Full Database Backup', skip, norewind, nounload, stats = 10
16  go
17
18  --Test BDRead--
19  select* from CAULACBO
20
21  select* from QUOCGIA
22
23  insert into TINH(MATINH, TENTINH)
24  values
25  ('NT', 'Nha Trang')
26
27  update CAULACBO set MACLB = 'HAGL'

```

Results grid: Messages

MAQD	TENDQ
ANH	Anh Quốc
BDN	Bồ Đào Nha
BRA	Brazil
ITA	Ý
TBN	Tây Ban Nha
THA	Thái Lan
VN	Việt Nam

Query executed successfully.

SQLQuery1.sql - ...ngDa (BDRead (66))

```

13  --backup database QLBongDa
14  to disk = 'C:\LAB2\QLBongDa.bak'
15  with noformat, noinit, name=N'QLBongDa-Full Database Backup', skip, norewind, nounload, stats = 10
16  go
17
18  --Test BDRead--
19  select* from CAULACBO
20
21  select* from QUOCGIA
22
23  insert into TINH(MATINH, TENTINH)
24  values
25  ('NT', 'Nha Trang')
26
27  update CAULACBO set MACLB = 'HAGL'

```

Messages

Msg 219, Level 14, State 5, Line 23
The INSERT permission was denied on the object 'TINH', database 'QLBongDa', schema 'dbo'.

Completion time: 2024-04-13T20:23:26.0324930+07:00

119 %

Query completed with errors.

SQLQuery3.sql - ...ngDa (BDRead (66))

```

19  select* from CAULACBO
20
21  select* from QUOCGIA
22
23  insert into TINH(MATINH, TENTINH)
24  values
25  ('NT', 'Nha Trang')
26
27  update CAULACBO set MACLB = 'HAGL'
28  where MASAN = 'PL' and MATINH = 'GL'
29

```

Messages

Msg 229, Level 14, State 5, Line 27
The UPDATE permission was denied on the object 'CAULACBO', database 'QLBongDa', schema 'dbo'.

Completion time: 2024-04-13T20:23:52.7449424+07:00

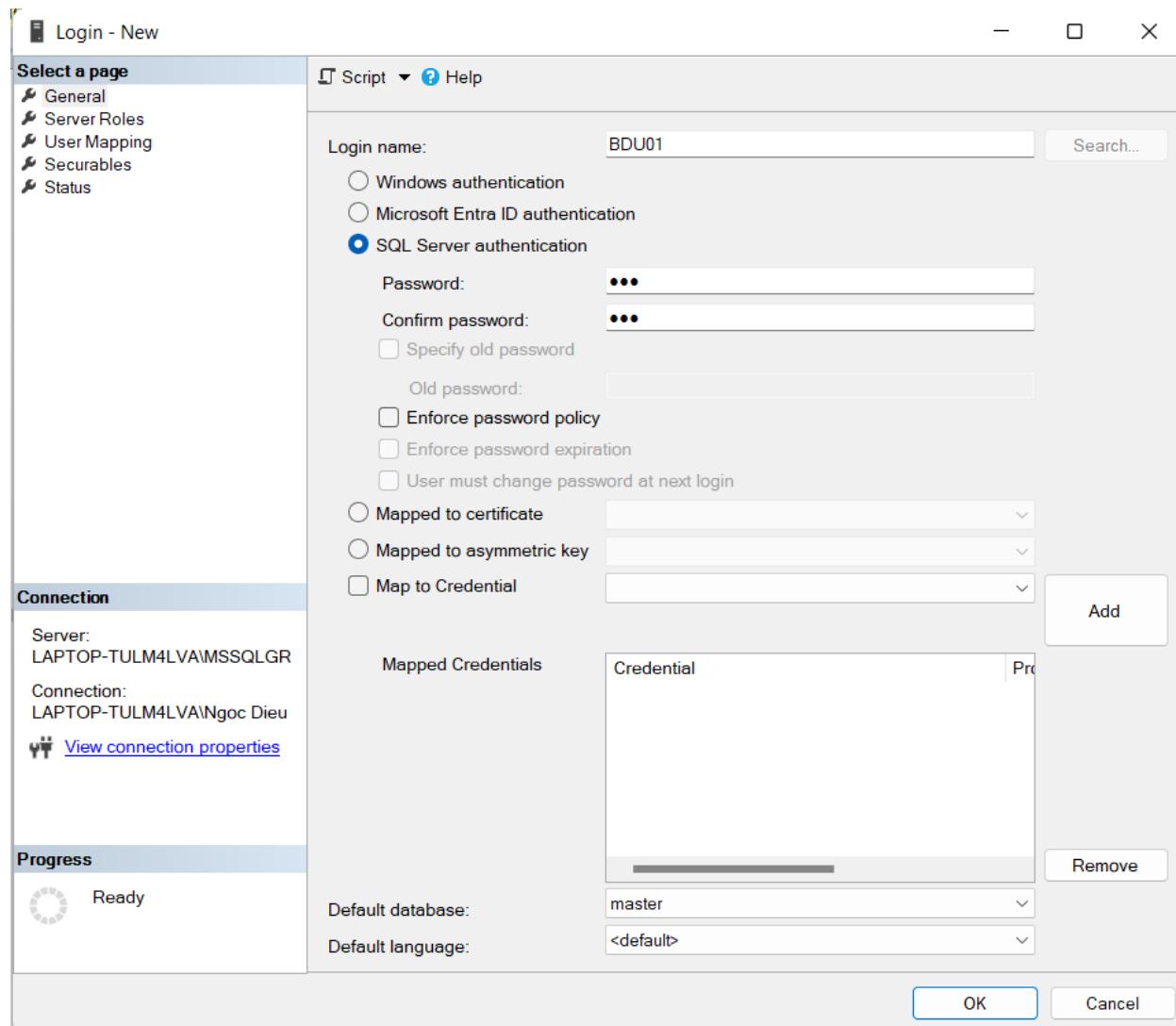
119 %

Query completed with errors.

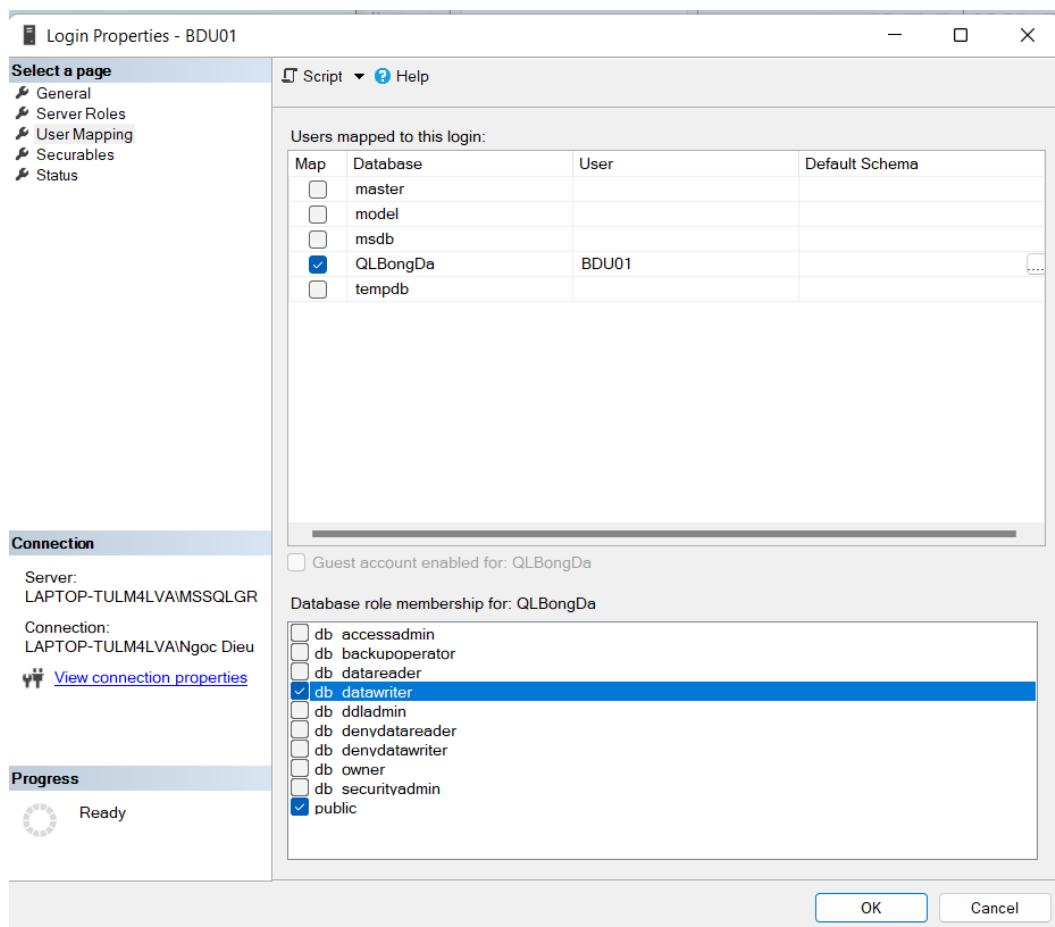
4. BDU01

4.1. Cài đặt

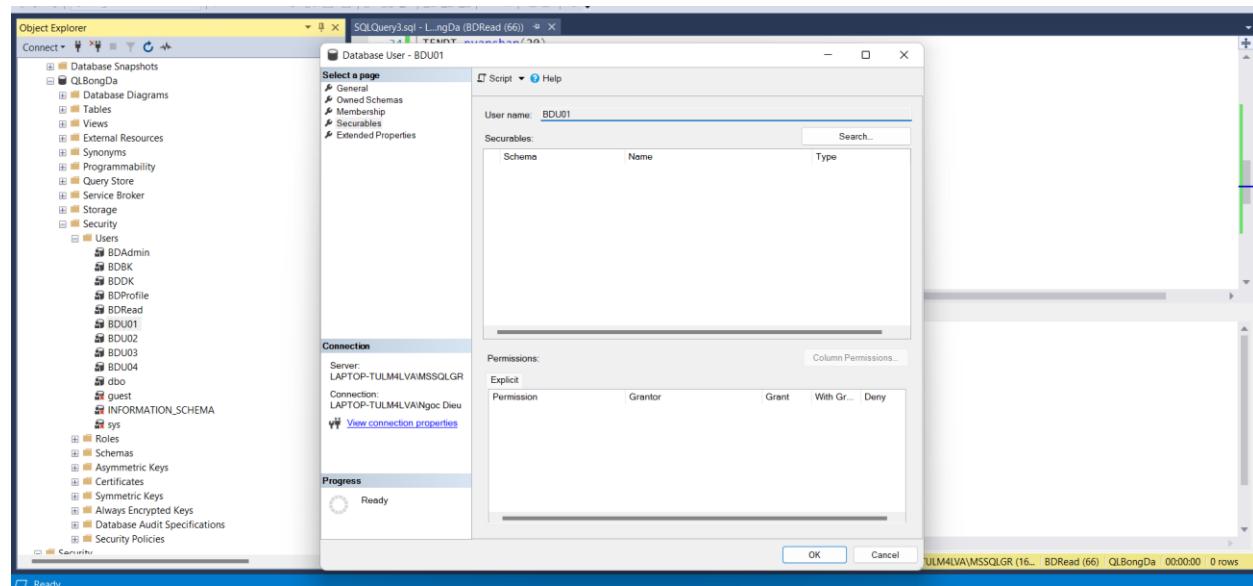
B1: Tạo user mới với loại ủy quyền là SQL Server Authentication



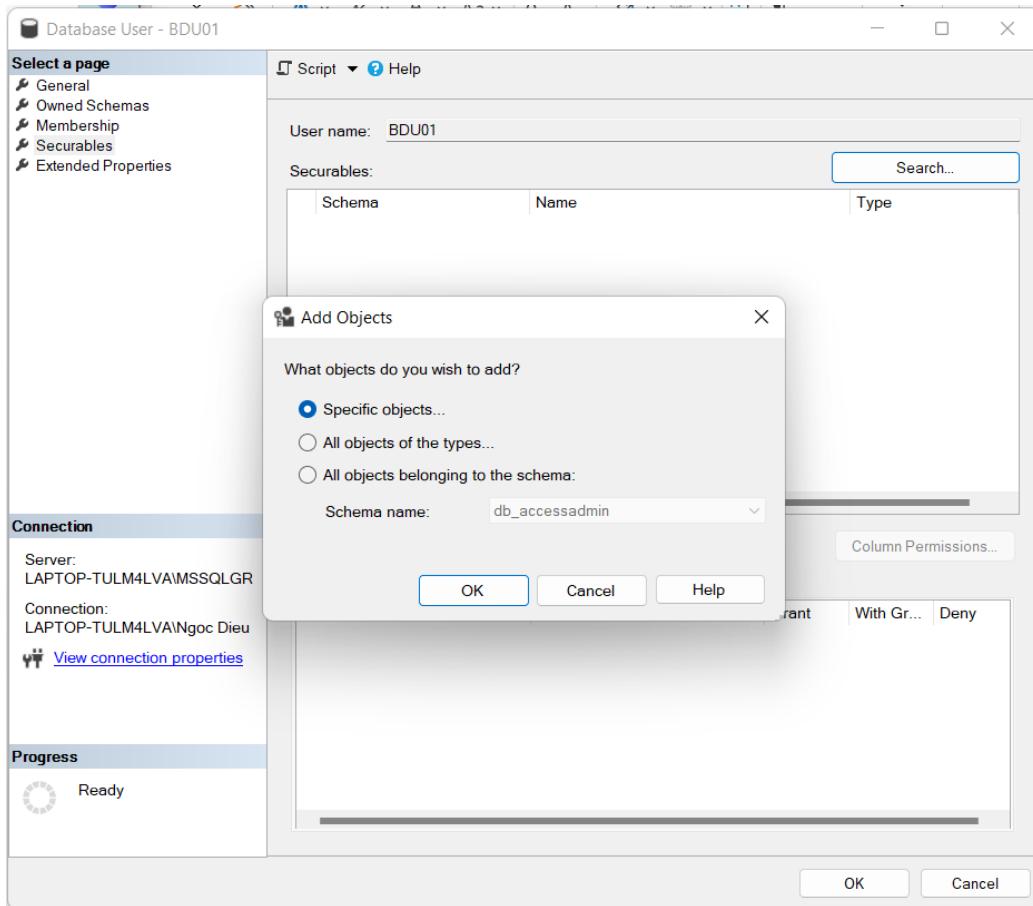
B2: Nháy đúp vô phần **user BDU01**, chọn **User Mapping**, map với database **QLBongDa** với role **db datawriter** và **public**



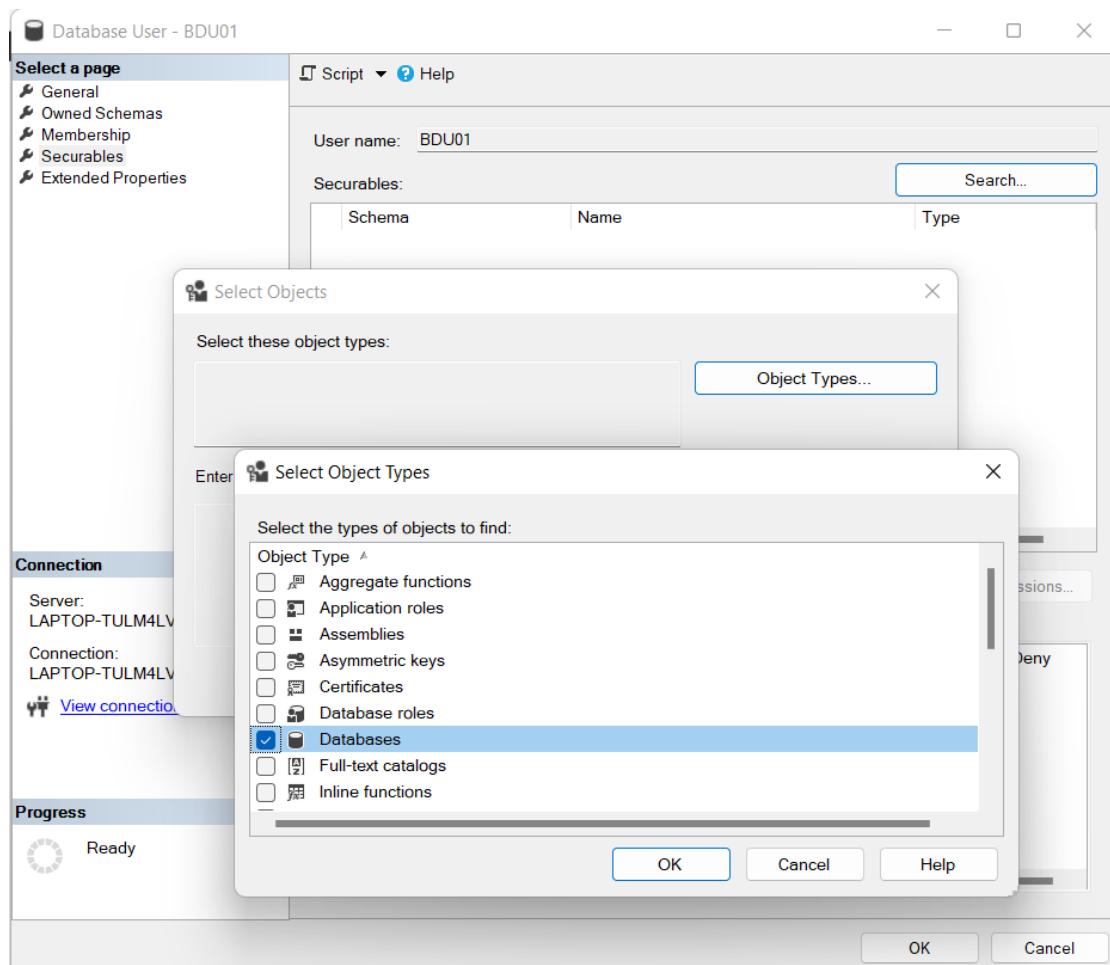
B3: Ở phần Database chọn **QLBongDa => Security => Nháy đúp vào BDU01**



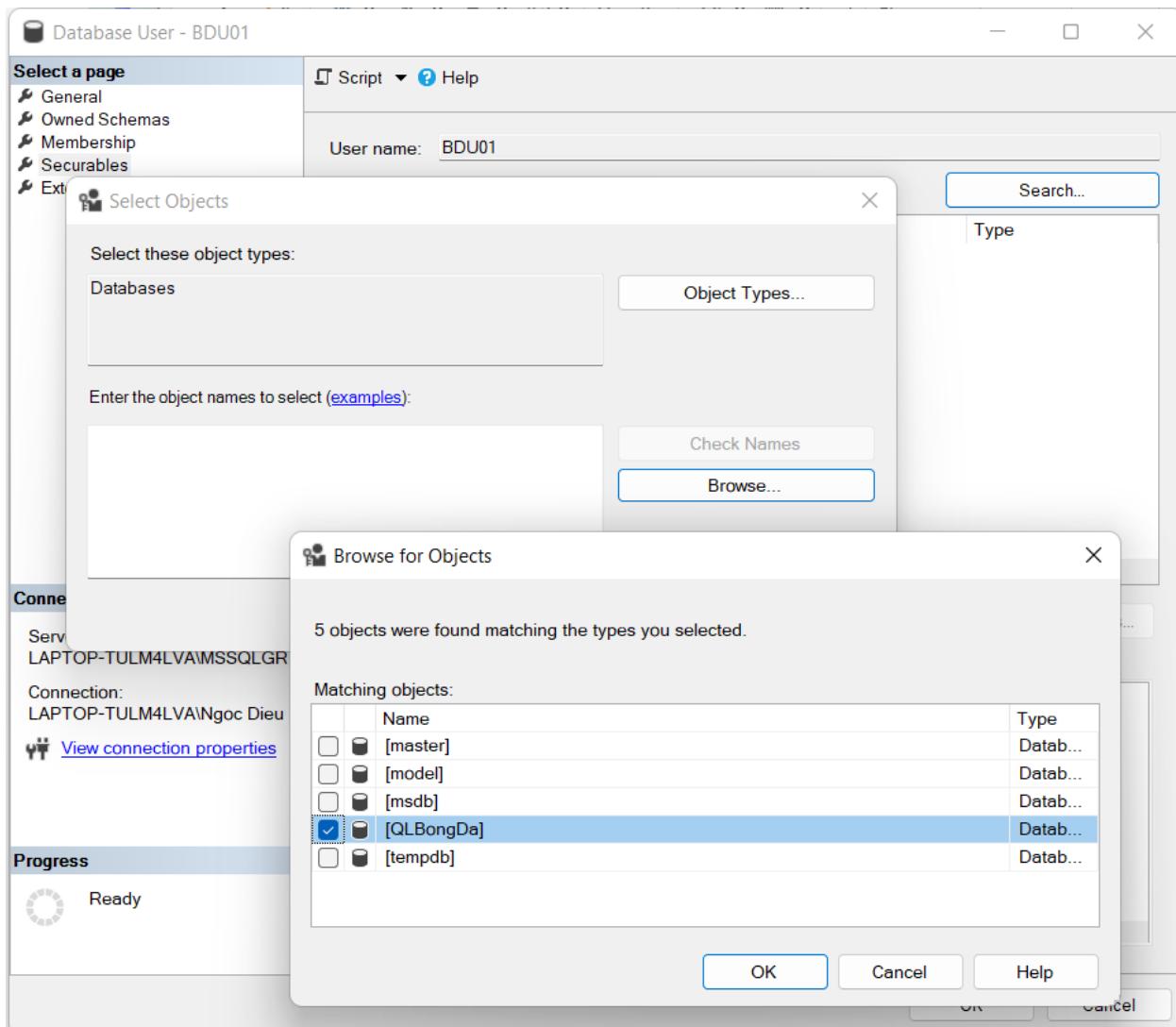
B4: Chọn Search => Specific Objects => OK



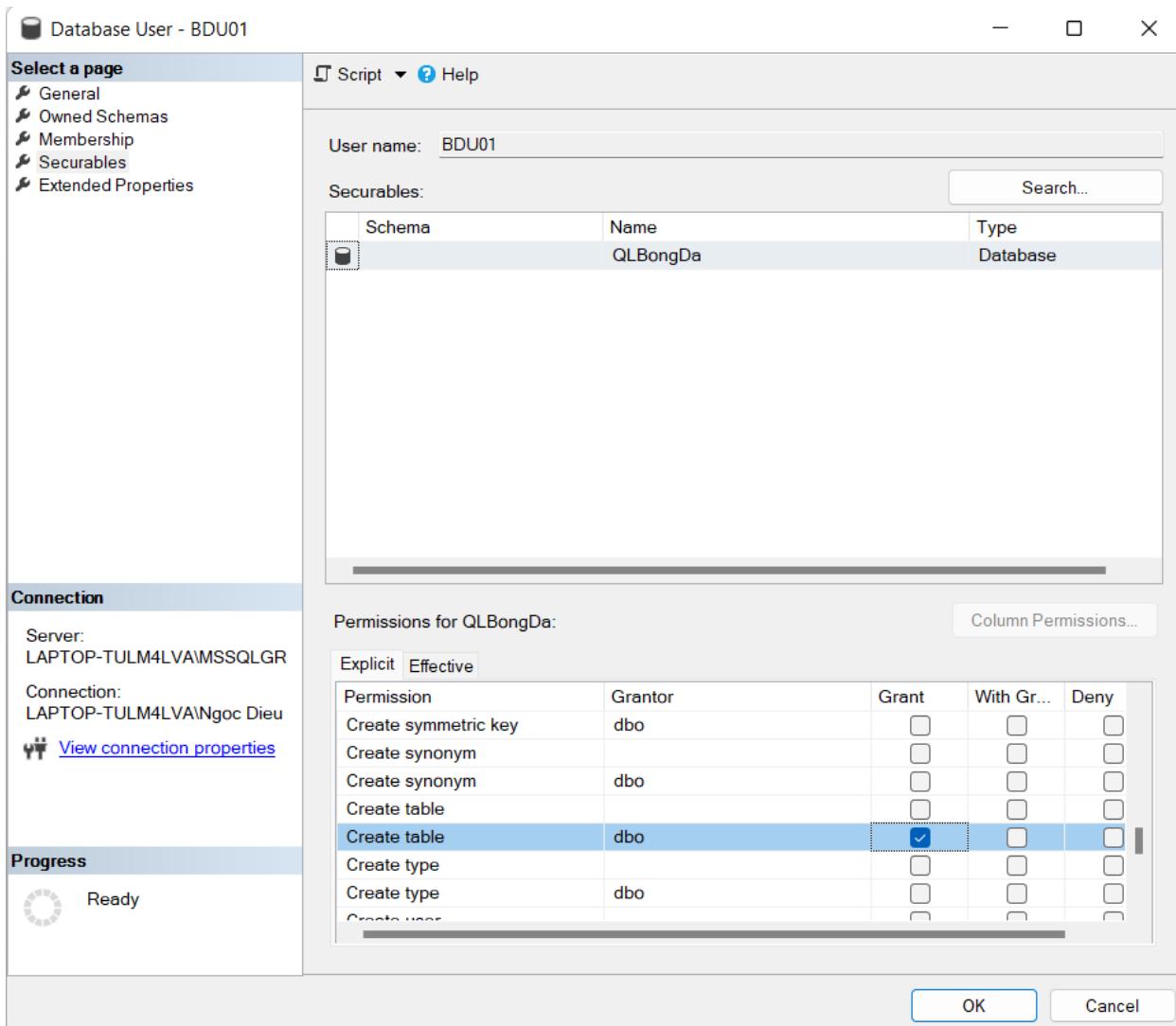
B5: Chọn Object Type => Chọn Database => OK



B6: Chọn Browser => Chọn db QLBongDa => OK => OK

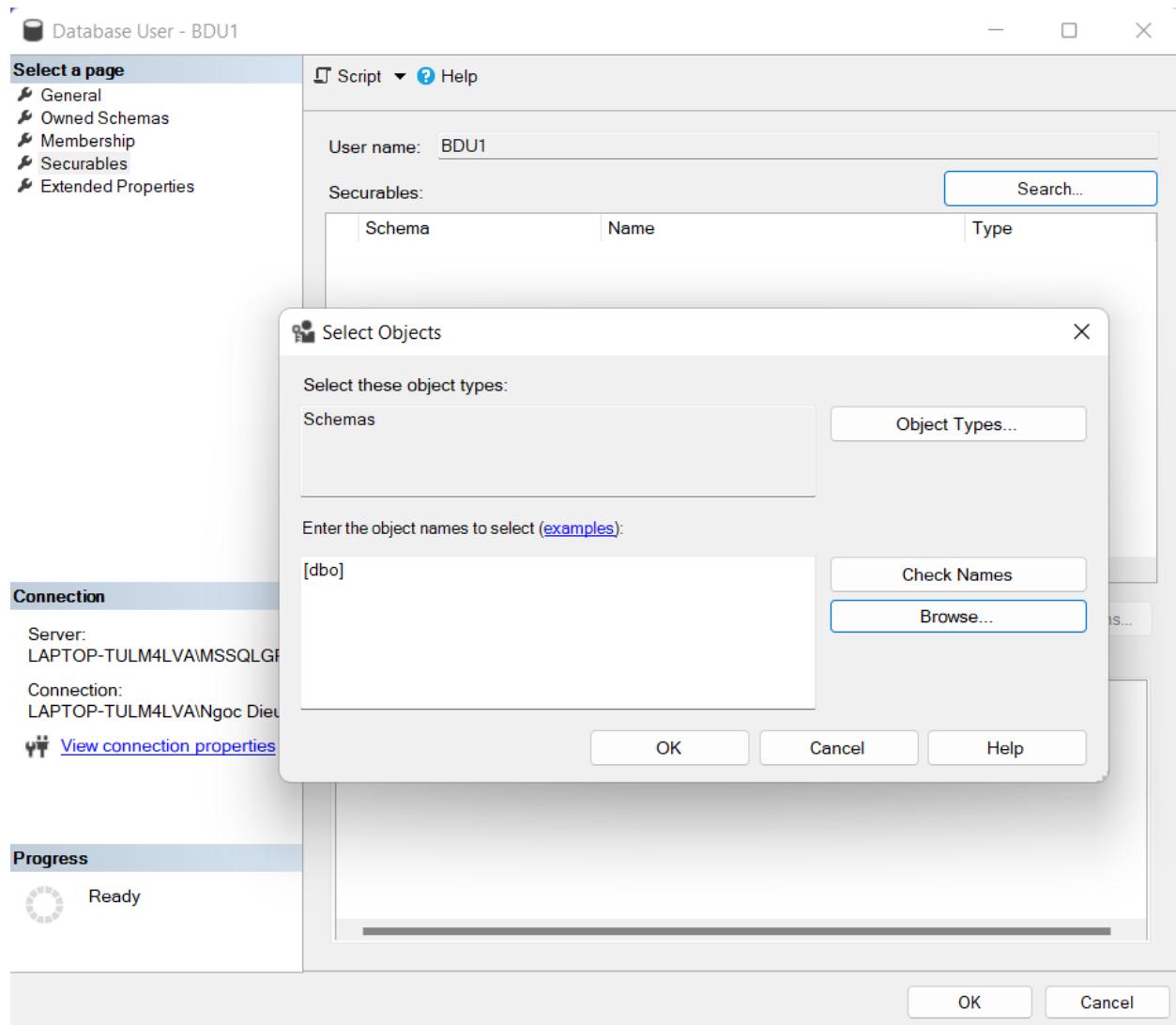


B7: Click Grant cho **Create table** => OK

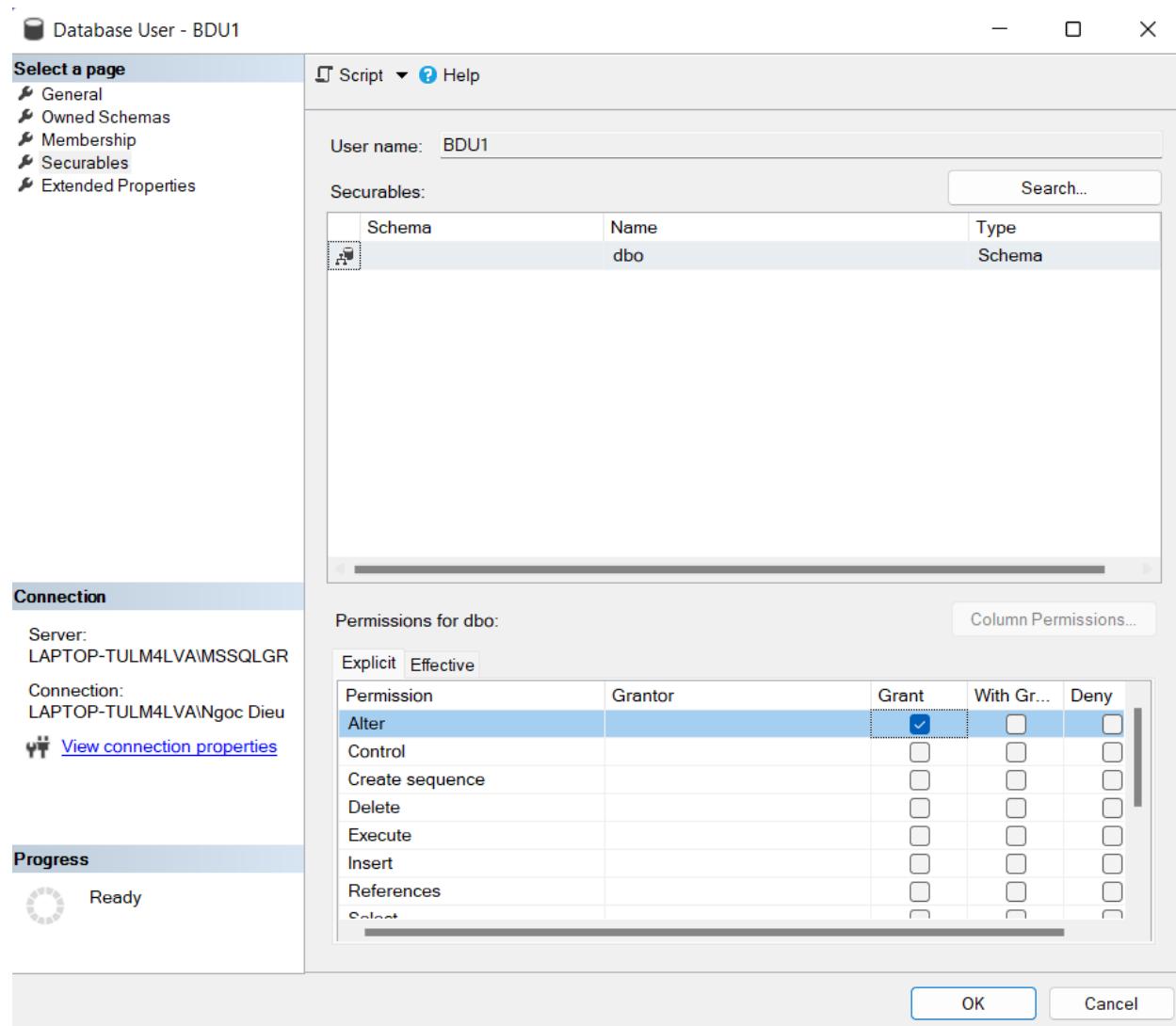


B8: Do user vẫn chưa thể tạo bảng, SQL server báo lỗi phải có quyền sở hữu. Vì để BDU01 không có quá nhiều quyền, em gán quyền Alter trên Schemas dbo, với quyền này thì DBU01 có thể tạo bảng, có thể xóa.

(vì một số lí do, nên khúc này em xin phép đổi user name sang BDU1 thay vì BDU01)



B9: Grant quyền Alter trên dbo cho BDU01



4.2. Kiểm tra

The screenshot shows the Object Explorer on the left, displaying the database structure of 'QLBongDa'. The 'Tables' node under 'LAPTOP-TULM4LVA\MSSQLGR (SQL Server 16.0.1000.6 - BDU1)' is expanded, showing various tables like 'CAULACBO', 'DOITRUONG', 'HANLUYENVIEN', etc. The 'Scripting' tab is selected in the ribbon. The main window contains a query editor with the following T-SQL script:

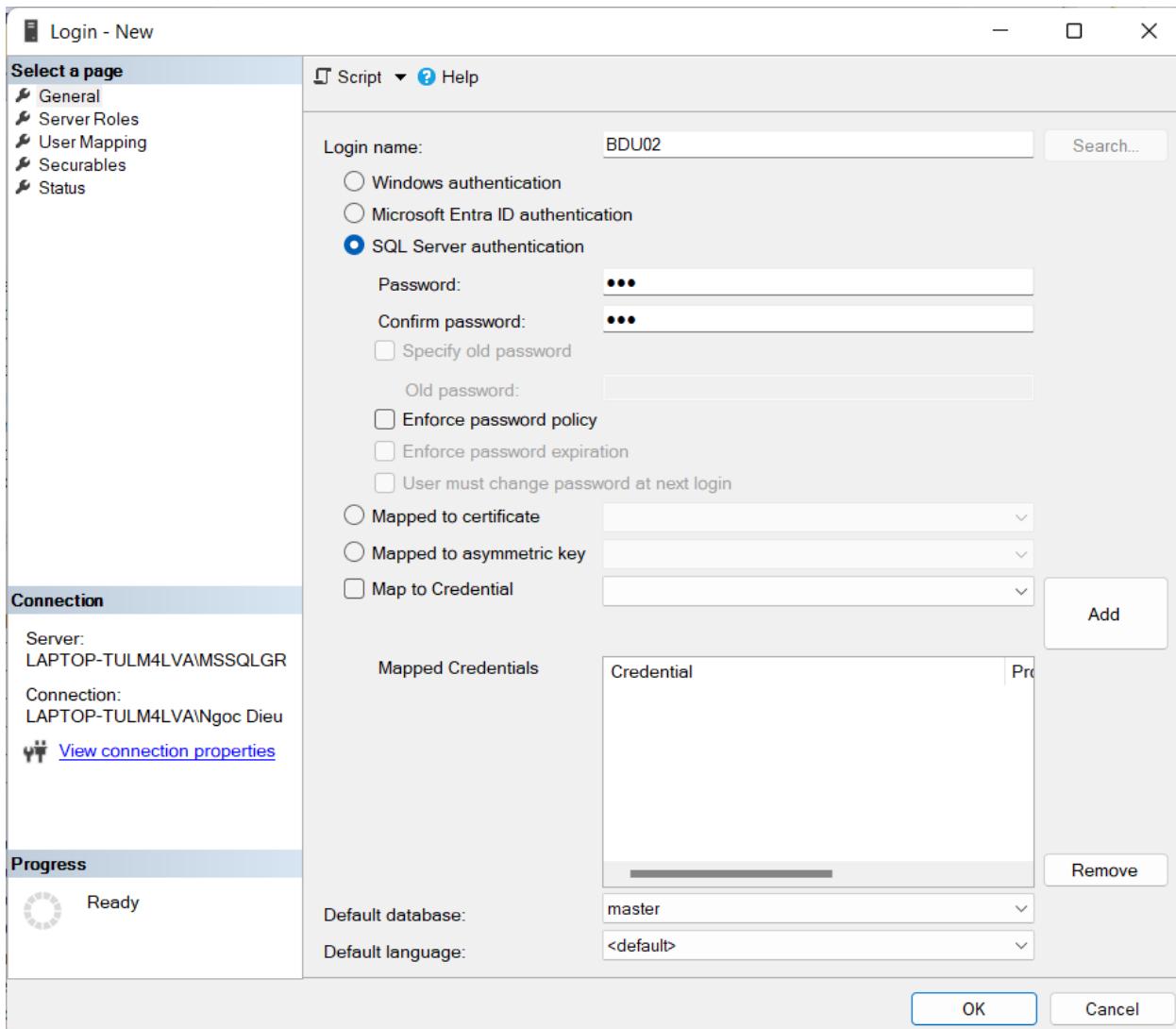
```
25 ('NT', 'Nha Trang')
26
27 update CAULACBO set MACLB =
28 where MASAN = 'PL' and MATINH = 'GL'
29
30 --Test BDU01-
31 create table dbo.DOITRUONG
32 (
33 MADT char(4) primary key,
34 TENDT nvarchar(20)
35 )
36
37
38
39
```

Below the script, the 'Messages' pane shows the command completed successfully with a completion time of 2024-04-13T22:11:42.9823910+07:00. At the bottom, a status bar indicates the session is connected to 'LAPTOP-TULM4LVA\MSSQLGR (16.. BDU1 (73) QLBongDa 00:00:00 | 0 rows'.

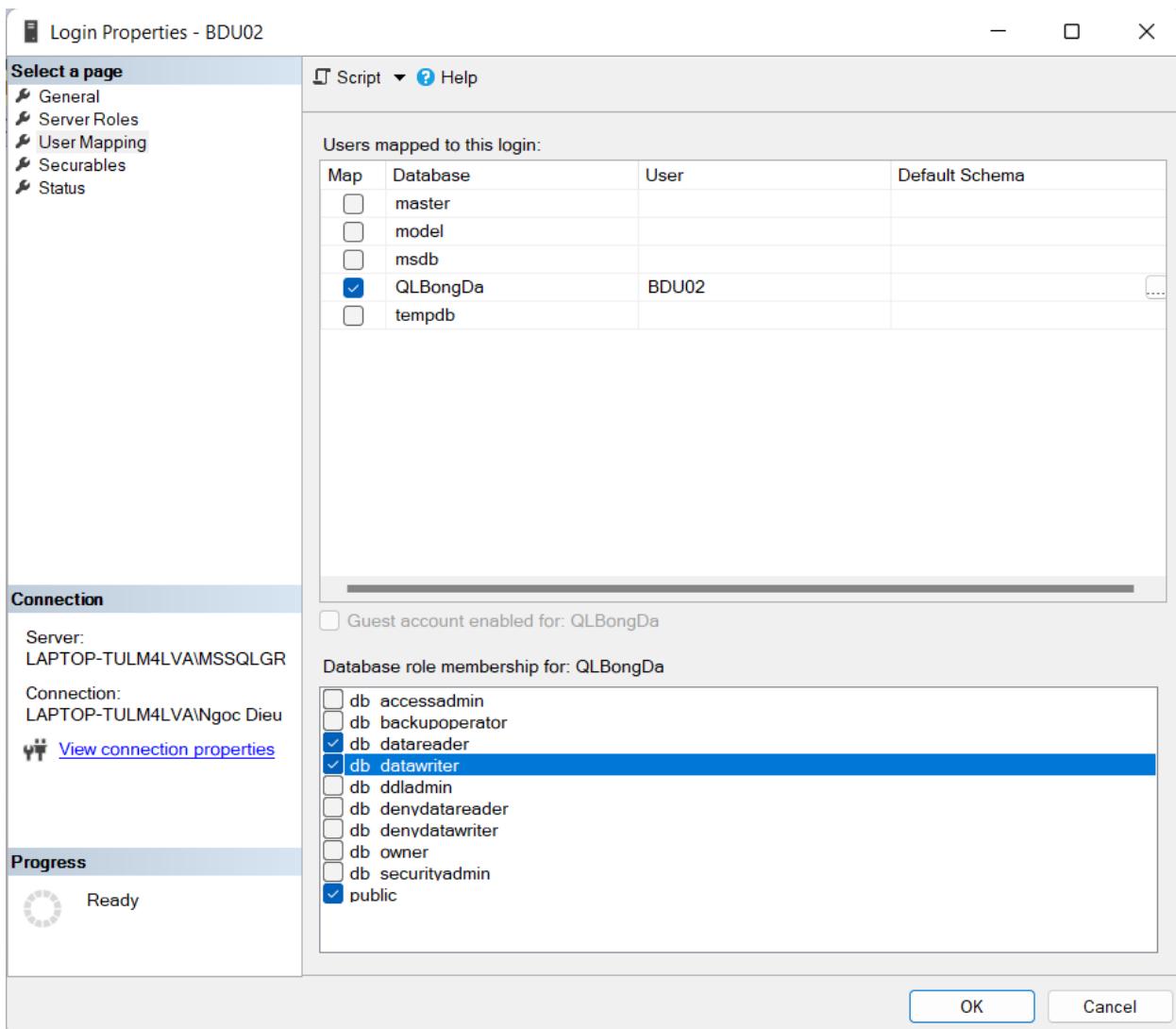
5. BDU02

5.1. Cài đặt

B1: Tạo user mới với loại ủy quyền là **SQL Server Authentication**



B2: Nháy đúp vô phần user BDU02, chọn User Mapping, map với database QLBongDa với role db datareader, db datawriter và public



5.2. Kiểm tra

The screenshot shows the Object Explorer on the left and the SQL Query window on the right. The query executed is:

```

40
41
42
43 --Test BDU02--
44 insert into SANVD(MASAN, TENSAN, DIACHI)
45 values
46 ('GG', 'N'Hoang Gia', N'13/4 Xa Lộ Hà Nội')
47
48 delete SANVD where MASAN = 'GG'
49
50 drop table CAUTHU
51
52 create table DOITRUONG1
53 (
54 MADT char(4) primary key,
55 TENDT nvarchar(20)

```

The status bar at the bottom indicates "Query executed successfully."

The screenshot shows the Object Explorer on the left and the SQL Query window on the right. The query executed is identical to the one in the previous screenshot:

```

40
41
42
43 --Test BDU02--
44 insert into SANVD(MASAN, TENSAN, DIACHI)
45 values
46 ('GG', 'N'Hoang Gia', N'13/4 Xa Lộ Hà Nội')
47
48 delete SANVD where MASAN = 'GG'
49
50 drop table CAUTHU
51
52 create table DOITRUONG1
53 (
54 MADT char(4) primary key,
55 TENDT nvarchar(20)

```

The status bar at the bottom indicates "Query executed successfully."

```

40
41
42
43 --Test BDU02--
44 insert into SANVD(MASAN, TENSAN, DIACHI)
45 values
46 ('GG', N'Hoàng Gia', N'13/4 Xa Lộ Hà Nội')
47
48 delete SANVD where MASAN = 'GG'
49
50 drop table CAUTHU
51
52 create table DOITRUONG1
53 (
54 MADM char(4) primary key,
55 TENDT nvarchar(20)
119 %
56
57
58 --Test BDU03--
59 select* from dbo.CAULACBO
119 %

```

Messages

Msg 3701, Level 14, State 20, Line 50
Cannot drop the table 'CAUTHU', because it does not exist or you do not have permission.

Completion time: 2024-04-13T21:35:37.9181738+07:00

Query completed with errors.

```

46 ('GG', N'Hoàng Gia', N'13/4 Xa Lộ Hà Nội')
47
48 delete SANVD where MASAN = 'GG'
49
50 drop table CAUTHU
51
52 create table DOITRUONG1
53 (
54 MADM char(4) primary key,
55 TENDT nvarchar(20)
56
57
58 --Test BDU03--
59 select* from dbo.CAULACBO
119 %

```

Messages

Msg 262, Level 14, State 1, Line 52
CREATE TABLE permission denied in database 'QLBongDa'.

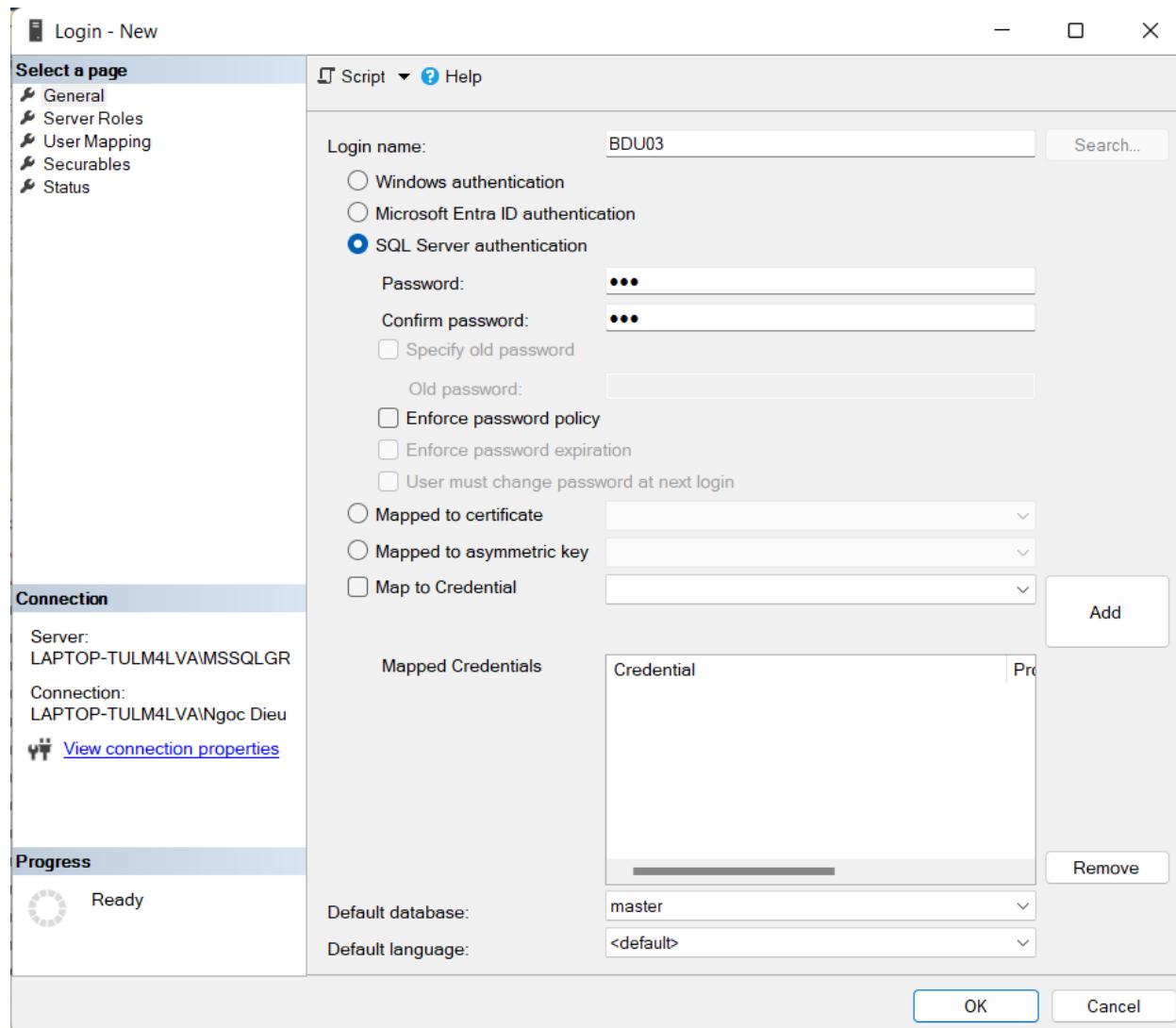
Completion time: 2024-04-13T21:35:52.153404+07:00

Query completed with errors.

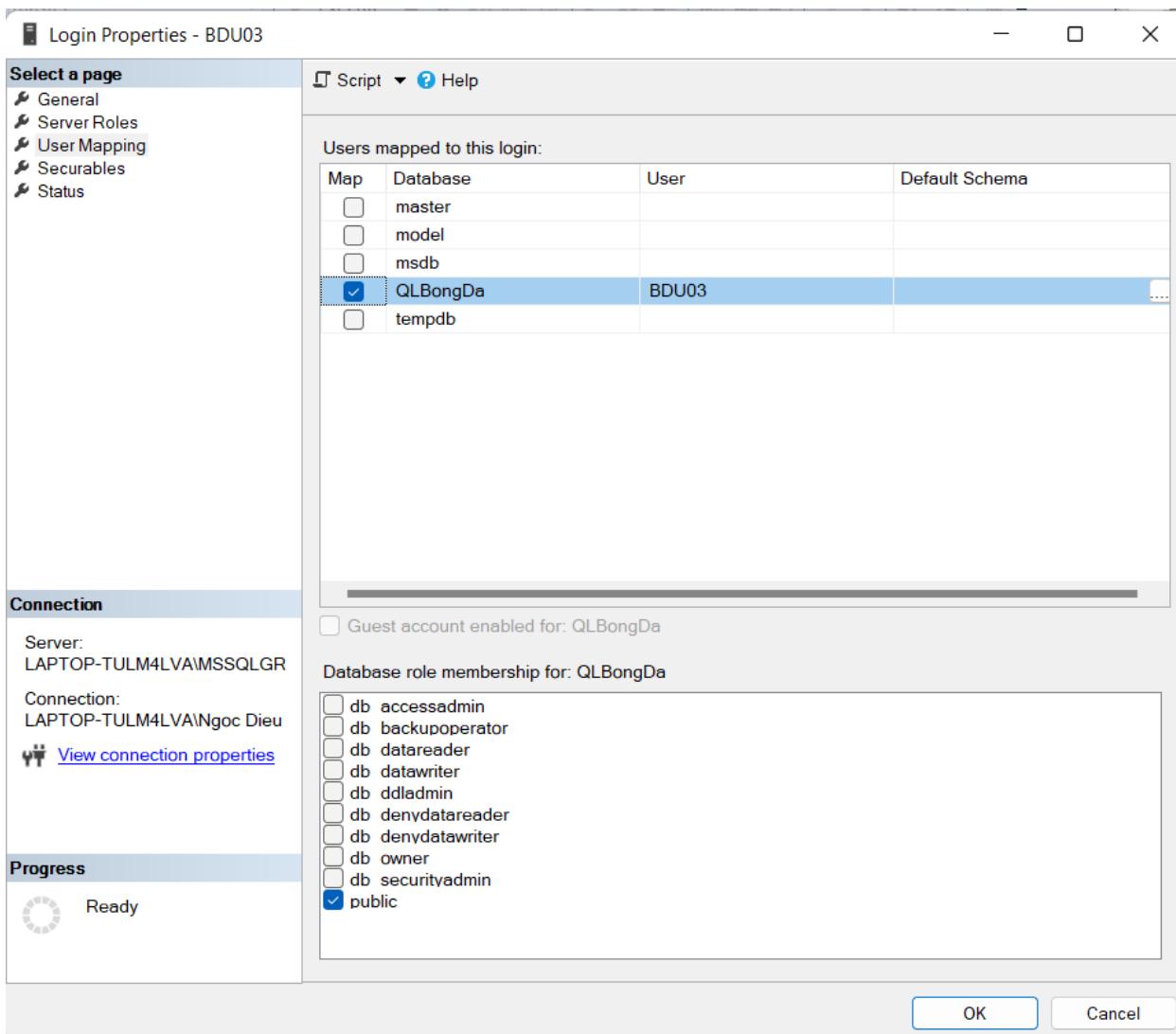
6. BDU03

6.1. Cài đặt

B1: Tạo user mới với loại ủy quyền là **SQL Server Authentication**

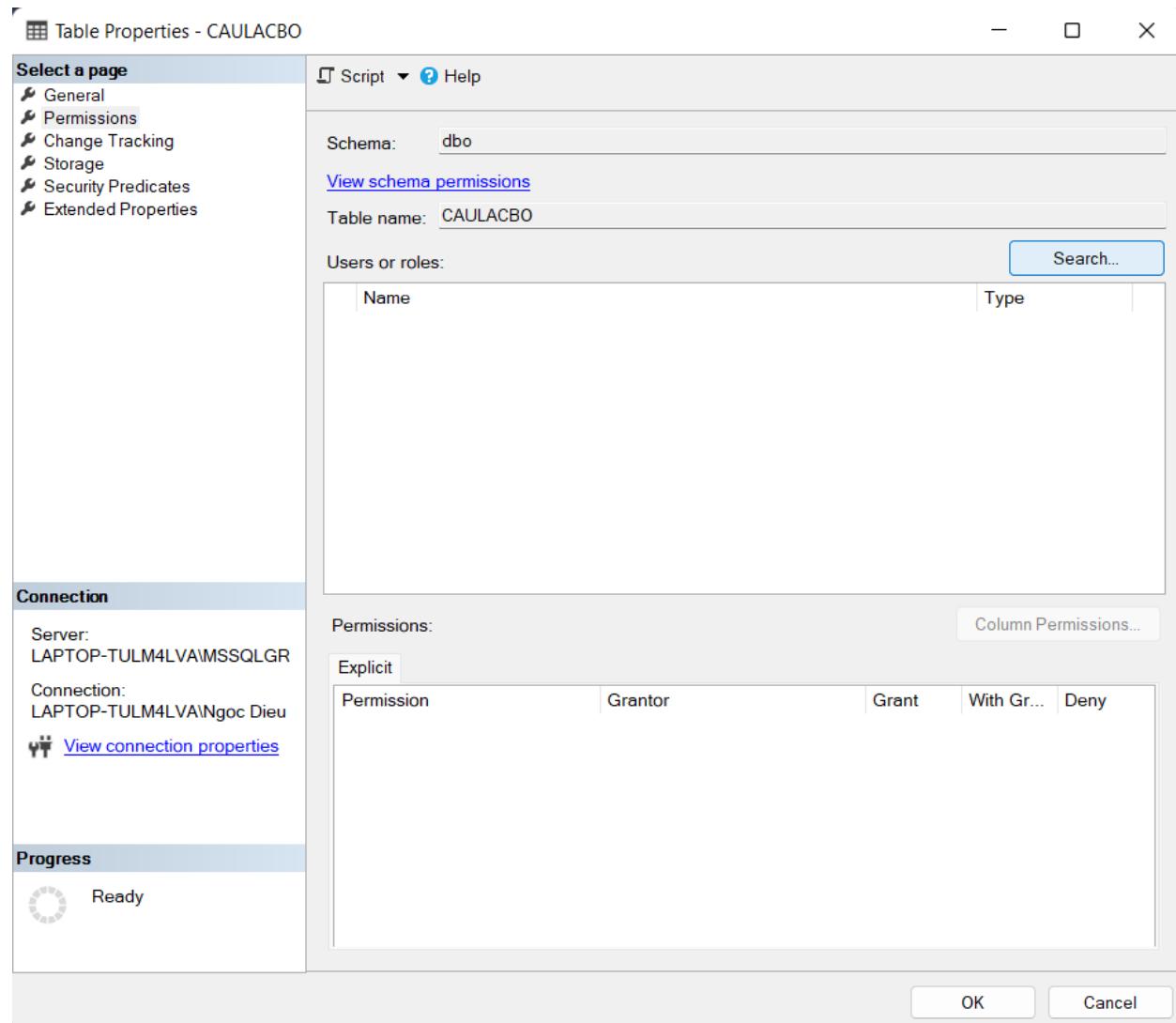


B2: Nháy đúp vô phần user BDU03, chọn User Mapping, map với database QLBongDa với role public

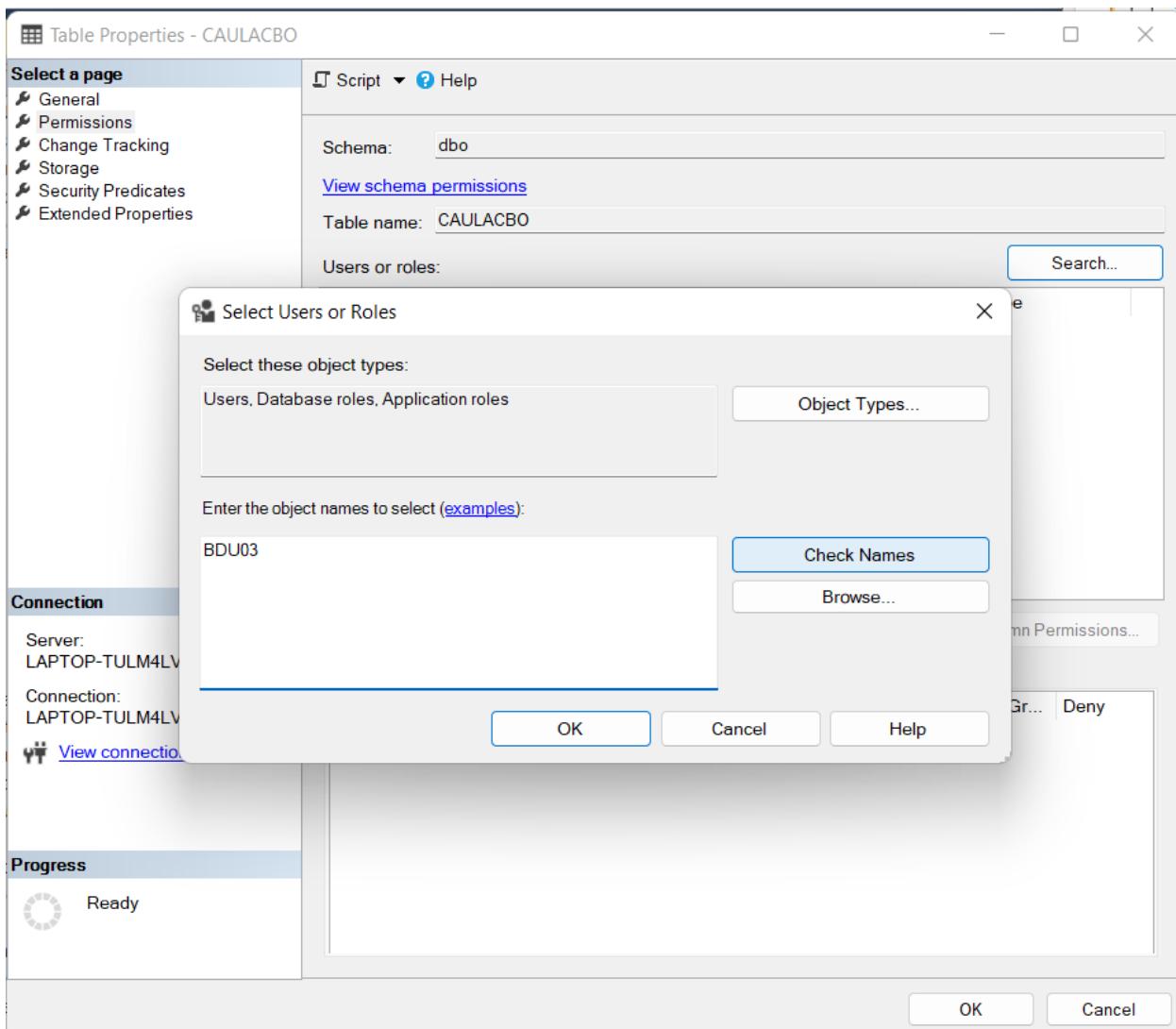


B3: Ở phần Database chọn

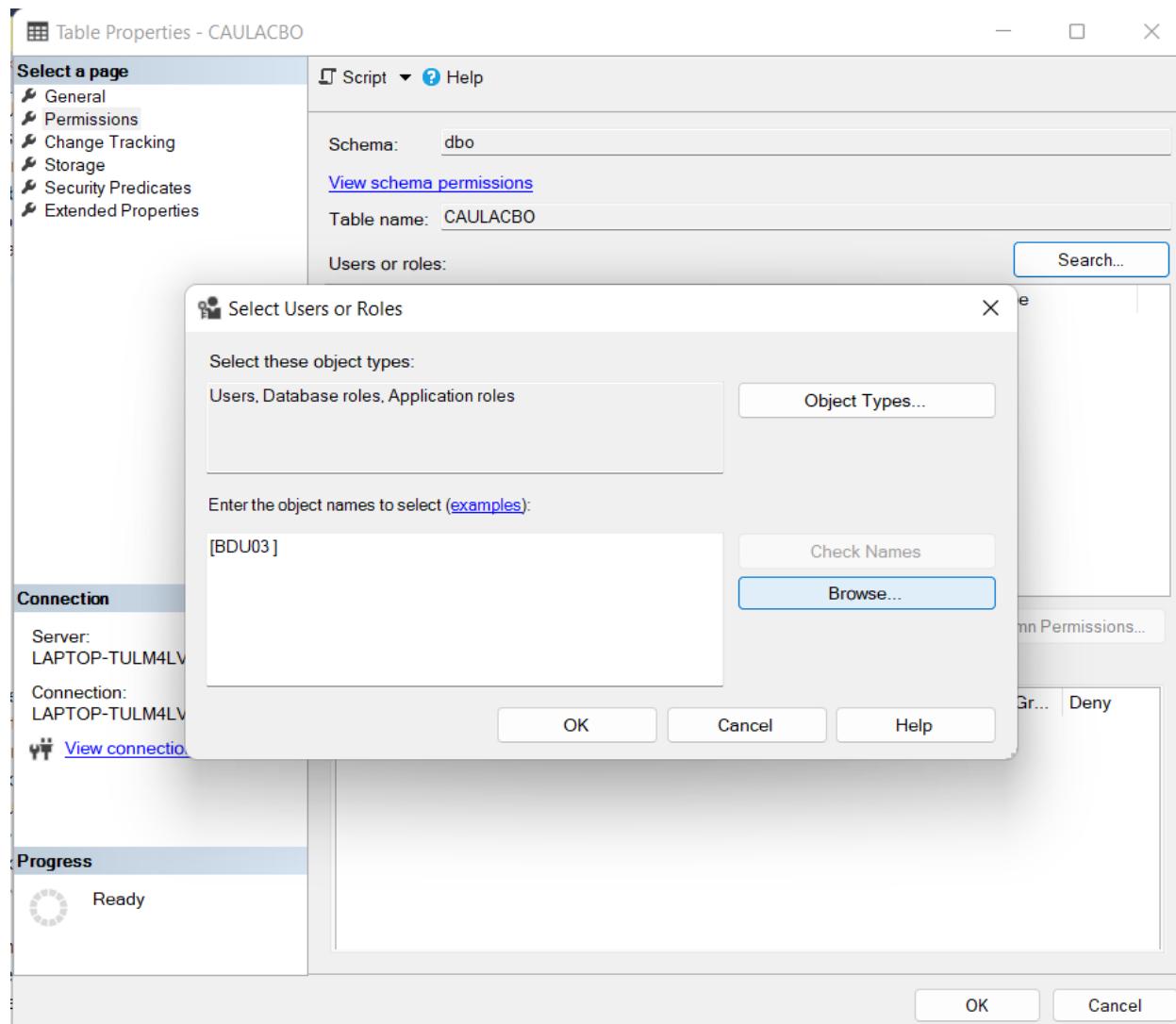
QLBongDa => Tables => dbo.CAULACBO => Properties => Permissions => Search



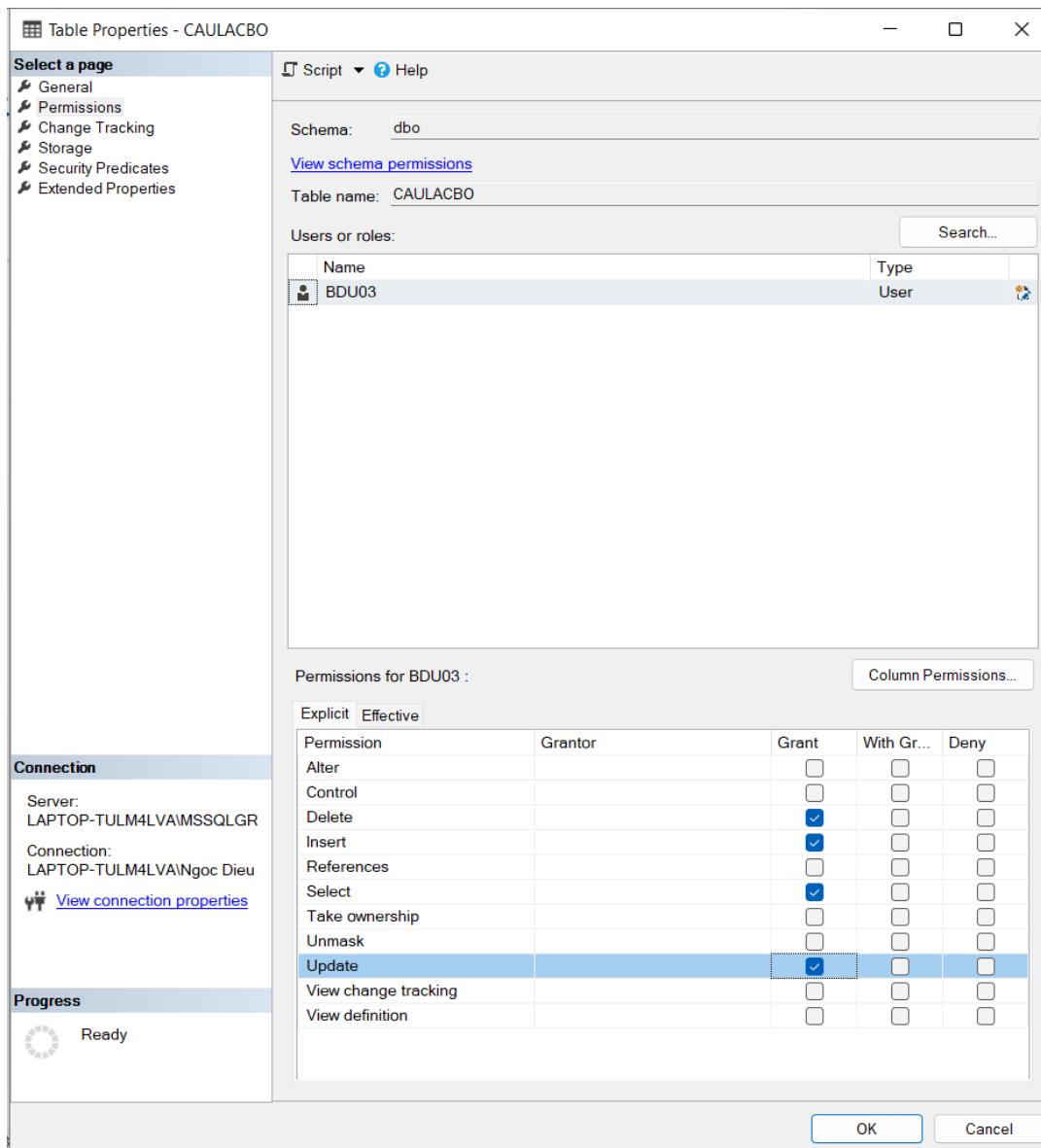
B4: Nhập tên user BDU03 và chọn **Check Name**



B5: Tìm user **BDU03** => **OK**



B6: Grant Permission – chọn **Delete, Insert, Select, Update**



6.2. Kiểm tra

```

54 MADC char(4) primary key,
55 TENDT nvarchar(20)
56 )
57
58 --Test BDU03--
59 select* from dbo.CAULACBO
60
61 insert into CAULACBO(MACLB, TENCLB, MASAN, MATINH)
62 values
63 ('HV', N'Hang Vuong', 'GD', 'BD')
64
65 delete CAULACBO where MACLB = 'HV'
66
67 select* from QUOCGIA
68

```

Results

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

Query executed successfully.

```

56 )
57
58 --Test BDU03--
59 select* from dbo.CAULACBO
60
61 insert into CAULACBO(MACLB, TENCLB, MASAN, MATINH)
62 values
63 ('HV', N'Hang Vuong', 'GD', 'BD')
64
65 delete CAULACBO where MACLB = 'HV'
66
67 select* from QUOCGIA
68
69 insert into TINH(MATINH, TENTINH)
70 values

```

Results

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

(1 row affected)

Completion time: 2024-04-13T21:27:08.7308656+07:00

Query executed successfully.

The screenshot shows the SSMS interface with the Object Explorer on the left and a query window on the right. The query window contains the following SQL code:

```

54  MACL char(4) primary key,
55  TENDT nvarchar(20)
56  )
57
58 --Test BDU03--
59 select* from dbo.CAULACBO
60
61 insert into CAULACBO(MACL, TENCLB, MASAN, MATINH)
62 values
63 ('HV', N'Hang Vuong', 'GD', 'BD')
64
65 delete CAULACBO where MACLB = 'HV'
66
67 select* from QUOCGIA
68

```

The status bar at the bottom indicates "Query executed successfully." and "Completion time: 2024-04-13T21:30:33.0347281+07:00".

The screenshot shows the SSMS interface with the Object Explorer on the left and a query window on the right. The query window contains the same SQL code as the first screenshot, but with additional statements:

```

69 insert into TIINH(MATINH, TENTINH)
70 values
71 ('CT', 'Can Tho')
72
73 delete SANVD where MASAN='GD'

```

The status bar at the bottom indicates "Query completed with errors." and "Completion time: 2024-04-13T21:30:37.2266181+07:00". A message in the status bar states: "Msg 229, Level 14, State 5, Line 67 The SELECT permission was denied on the object 'QUOCGIA', database 'QLBongDa', schema 'dbo'."

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the following SQL code:

```

60 insert into CAULACBO(MACLB, TENCLB, MASAN, MATINH)
61 values
62 ('HV', N'Hang Vuong', 'GD', 'BD')
63 delete CAULACBO where MACLB = 'HV'
64
65 select* from QUOCGIA
66
67 insert into TINH(MATINH, TENTINH)
68 values
69 ('CT', 'Can Tho')
70
71 delete SANVD where MASAN='GD'
72
73

```

In the Messages pane, it shows:

```

Msg 229, Level 14, State 5, Line 69
The INSERT permission was denied on the object 'TINH', database 'QLBongDa', schema 'dbo'.

```

Completion time: 2024-04-13T21:30:52.2728870+07:00

Query completed with errors.

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the same SQL code as the previous screenshot:

```

60 insert into CAULACBO(MACLB, TENCLB, MASAN, MATINH)
61 values
62 ('HV', N'Hang Vuong', 'GD', 'BD')
63 delete CAULACBO where MACLB = 'HV'
64
65 select* from QUOCGIA
66
67 insert into TINH(MATINH, TENTINH)
68 values
69 ('CT', 'Can Tho')
70
71 delete SANVD where MASAN='GD'
72
73

```

In the Messages pane, it shows:

```

Msg 229, Level 14, State 5, Line 69
The INSERT permission was denied on the object 'TINH', database 'QLBongDa', schema 'dbo'.

```

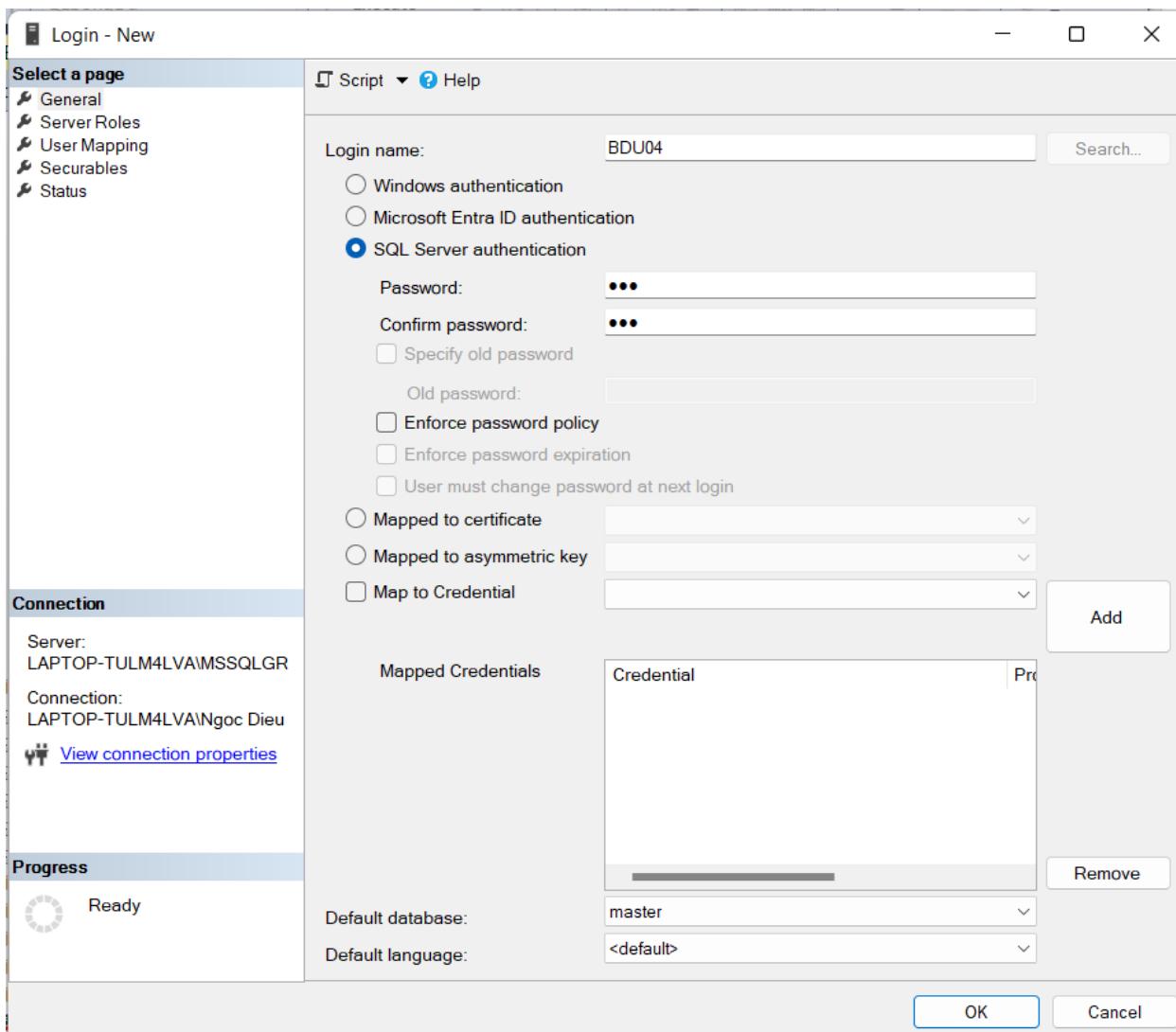
Completion time: 2024-04-13T21:30:52.2728870+07:00

Query completed with errors.

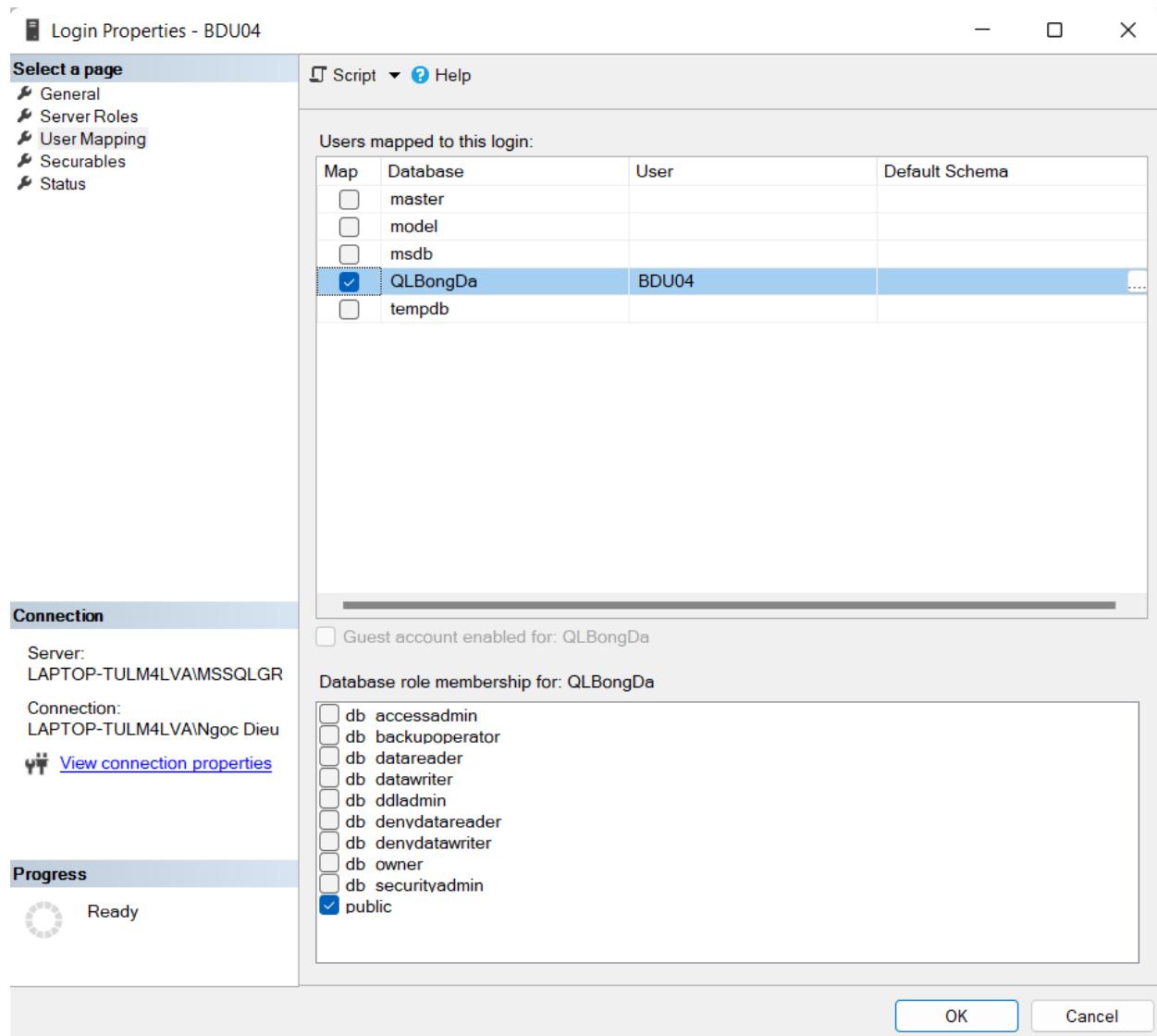
7. BDU04

7.1. Cài đặt

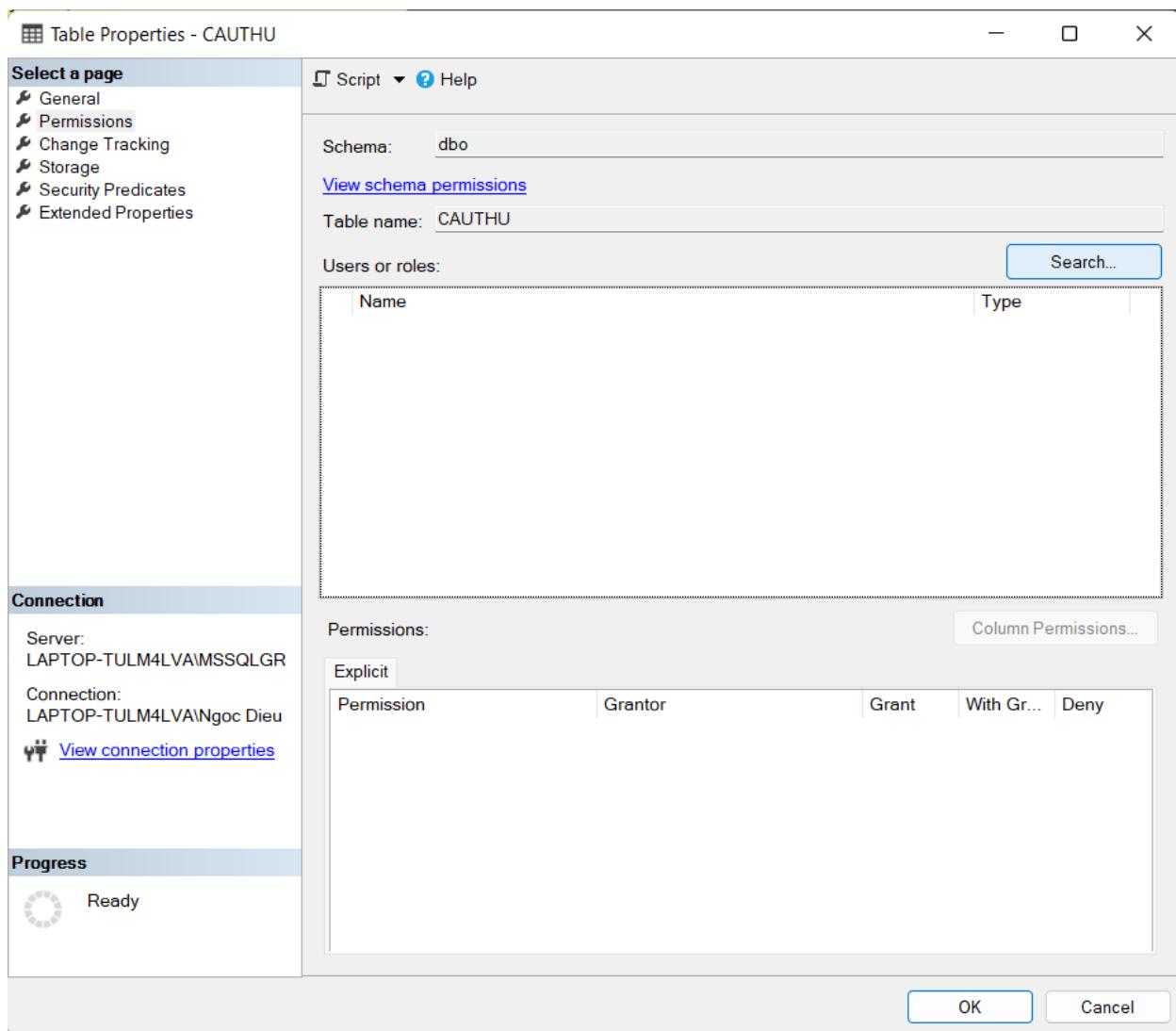
B1: Tạo user mới với loại ủy quyền là **SQL Server Authentication**



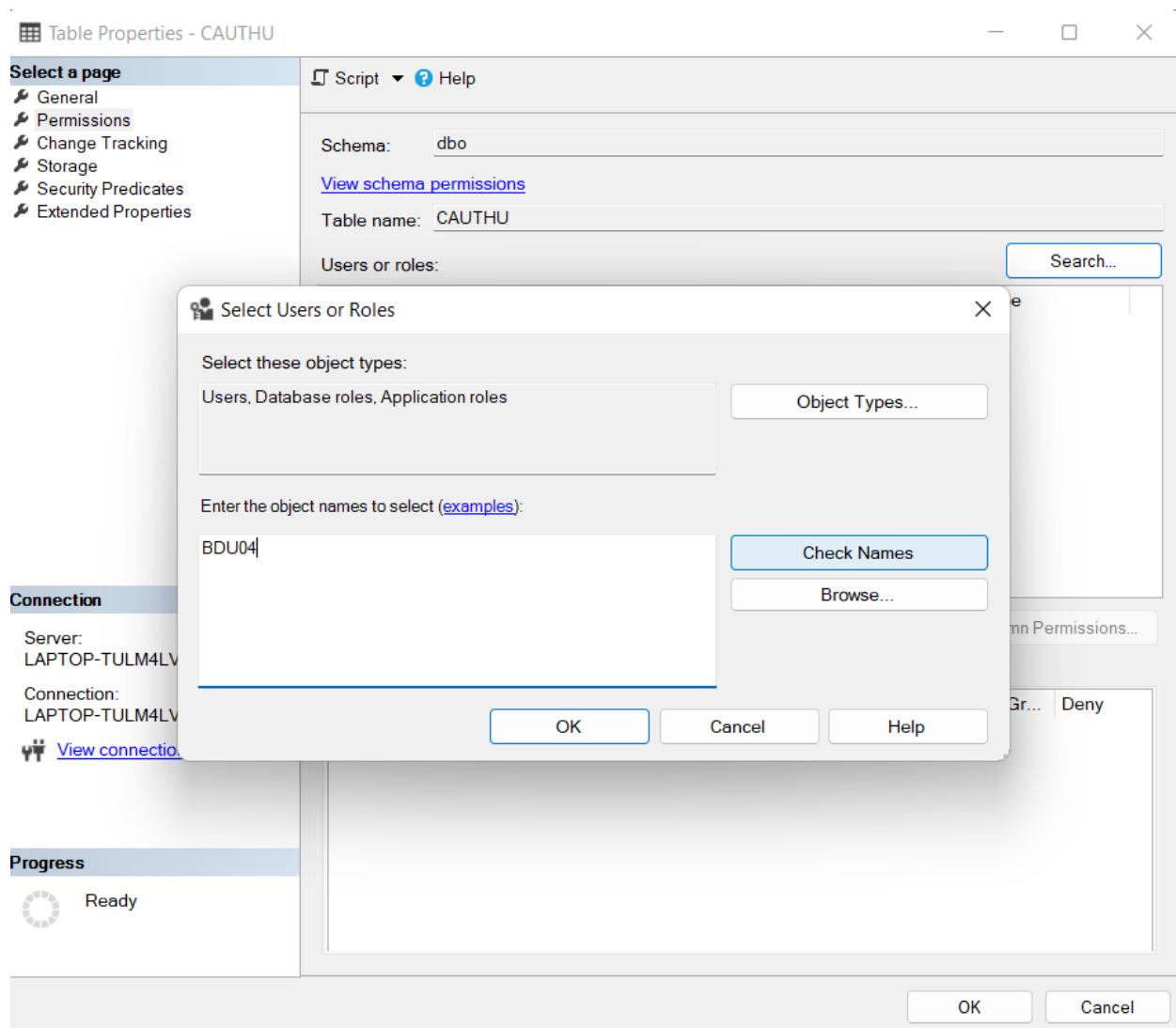
B2: Nháy đúp vô phần user BDU04, chọn User Mapping, map với database **QLBongDa** với public



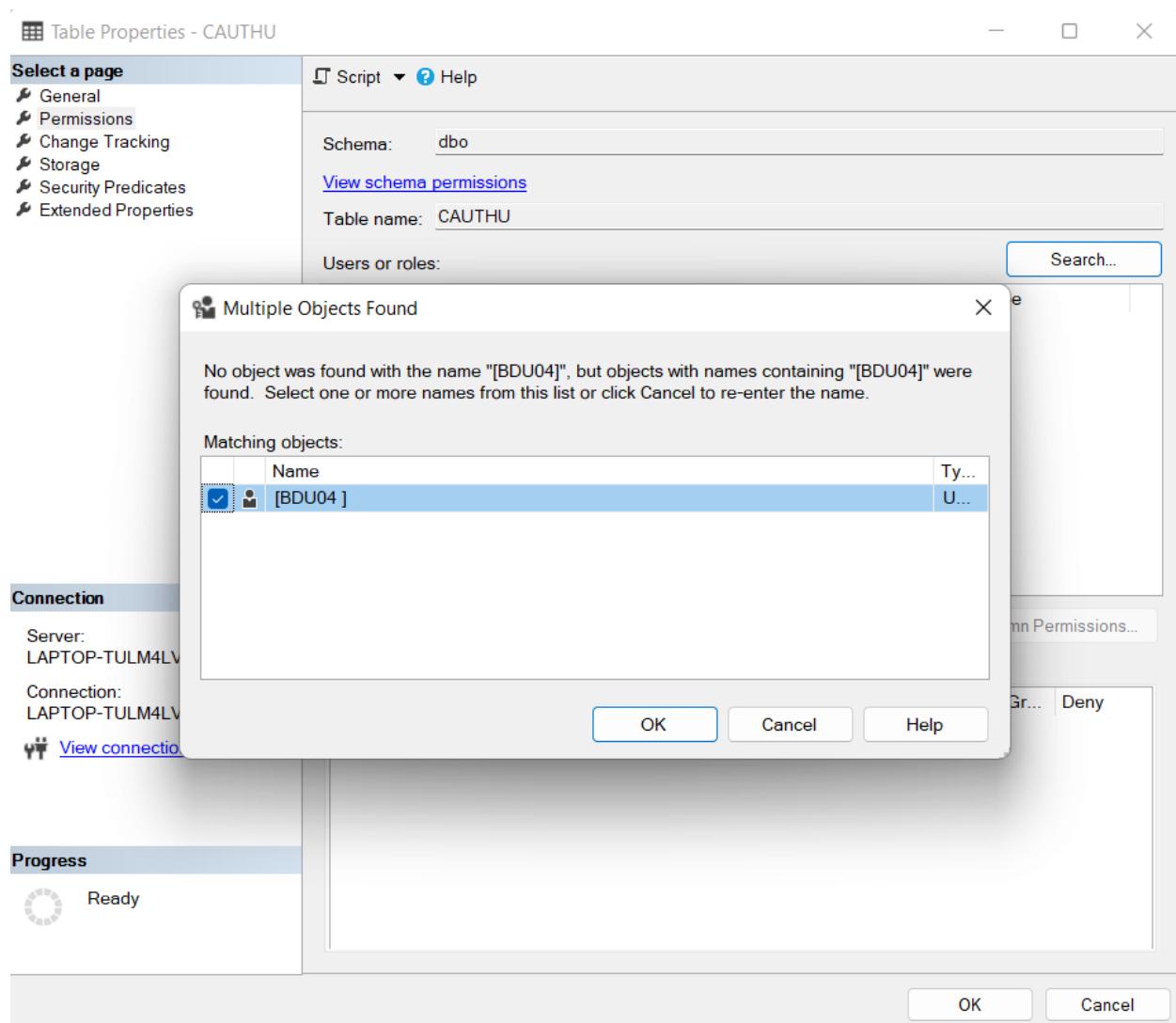
B3: Ở phần Database chọn **QLBongDa** => Tables => **dbo.CAUTHU** => Properties => Permissions => Search



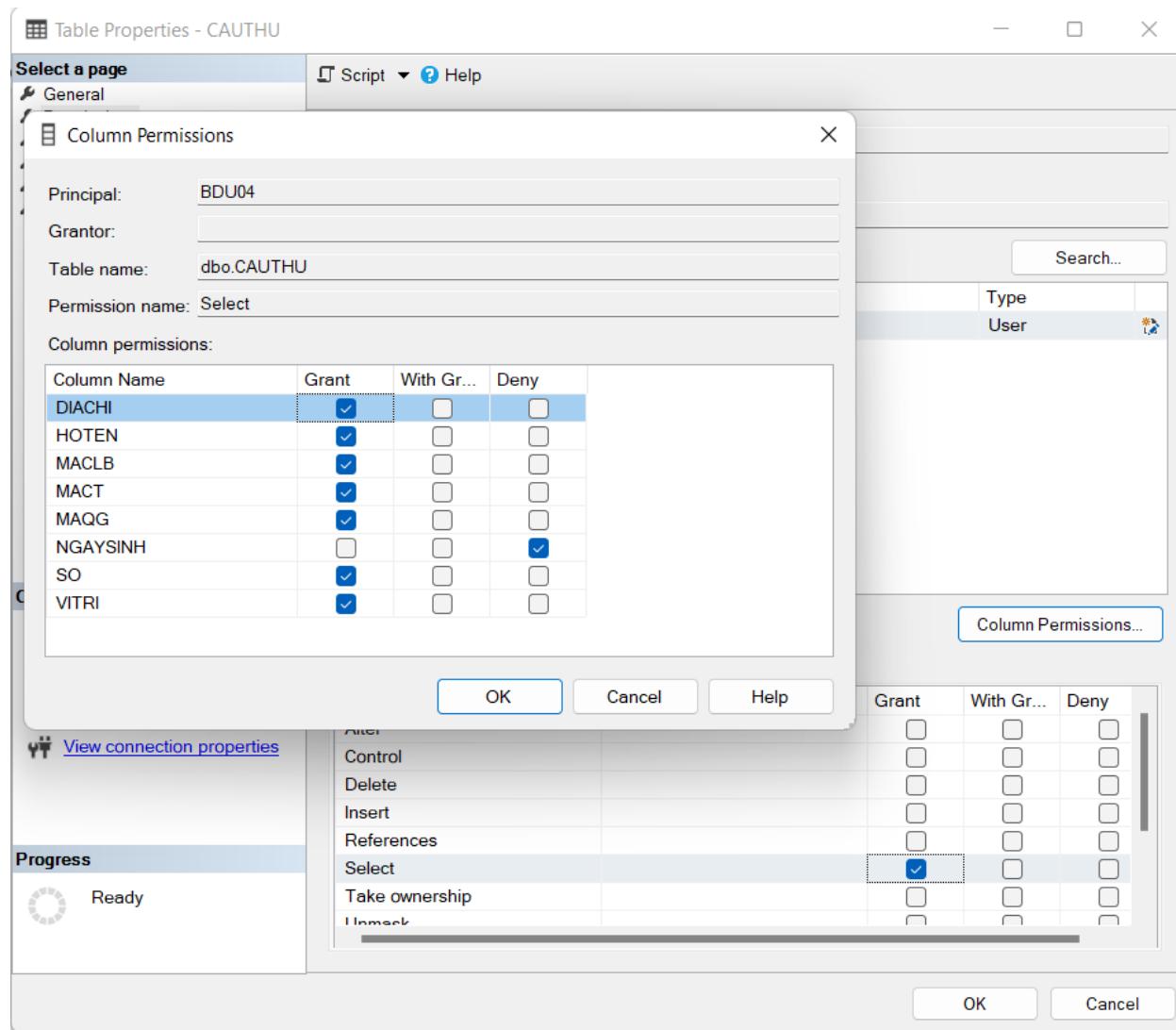
B4: Nhập tên user BDU04 và chọn **Check Name**



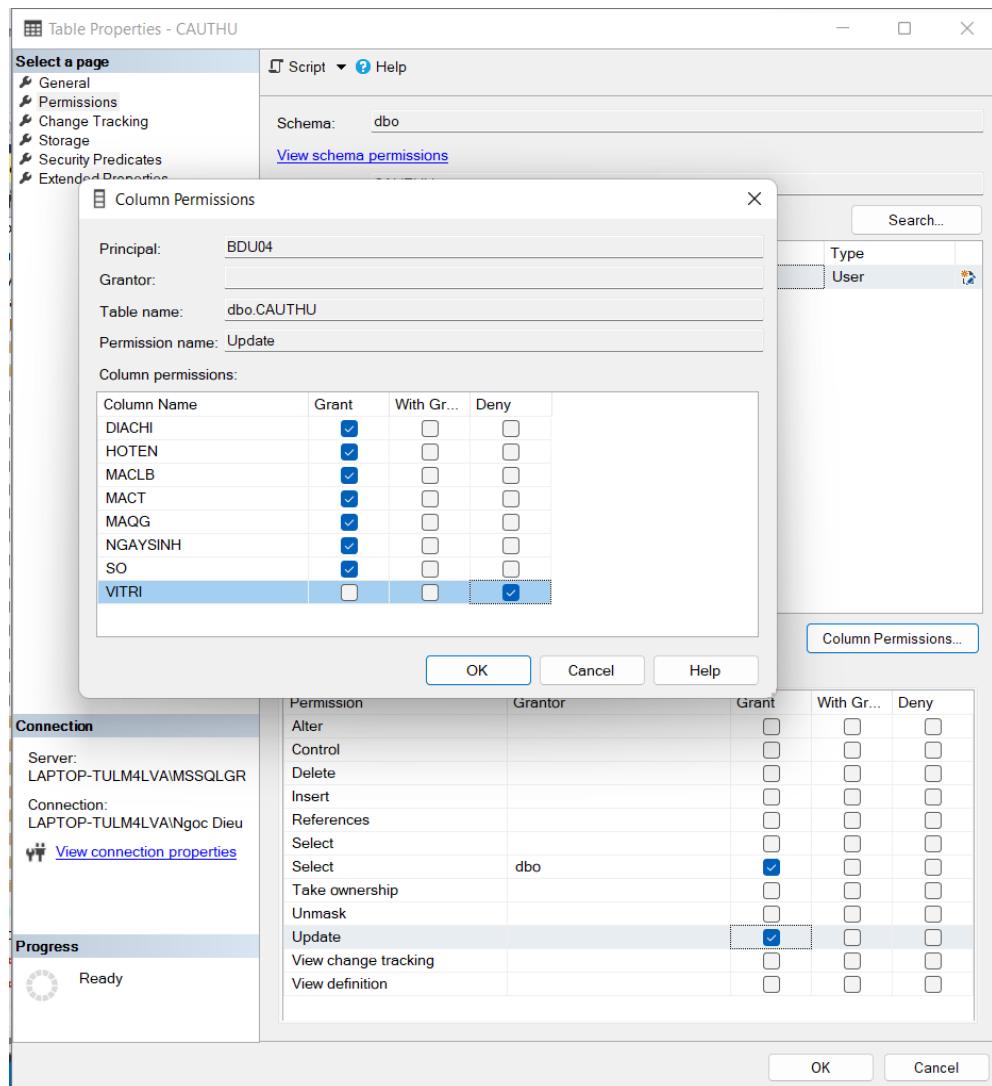
B5: Tìm user **BDU04** => **OK**



B6: Tích chọn **Select** và chọn **Column Permission**. Grant tất cả (trừ cột NGAYSINH được deny)



B7: Sau đó tích chọn **Update** và chọn **Column Permission**. Grant tất cả các cột (trừ cột VITRI được deny)



7.2. Kiểm tra

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the following code:

```

73: delete SANVD where MASAN='GD'
74:
75: --Test BDU04 --
76: select MACT, HOTEN, VITRI, DIACHI, MACLB, MAQG, SO from CAUTHU
77:
78: select CAUTHU.NGAYSINH from CAUTHU
79:
80: update CAUTHU set VITRI = N'Lum banh'
81: where MACT = 01
82:
83: select* from HLV_CLB
84:
85: select* from TINH

```

The results pane shows a table with 8 rows of data:

MACT	HOTEN	VITRI	DIACHI	MACLB	MAQG	SO
1	Nguyễn Vũ Phong	Tienda	NULL	BBD	VN	17
2	Nguyễn Công Vinh	Tienda	NULL	HAGL	VN	9
3	Trần Tân Tài	Tienda	NULL	BBD	VN	8
4	Phạm Hồng Sơn	Thủ môn	NULL	HAGL	VN	1
5	Ronaldo	Tienda	NULL	SON	BRA	7
6	Robinho	Tienda	NULL	SON	BRA	8
7	Vidic	Hậu vệ	NULL	HAGL	ANH	3
8	Trần Văn Santos	Thủ môn	NULL	BBD	BRA	1

At the bottom, a message says "Query executed successfully."

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the same code as the previous screenshot.

The results pane shows a table with 8 rows of data, identical to the first screenshot.

The messages pane at the bottom displays an error message:

```

Msg 230, Level 14, State 1, Line 78
The SELECT permission was denied on the column 'NGAYSINH' of the object 'CAUTHU', database 'QLBongDa', schema 'dbo'.
Completion time: 2024-04-13T21:42:33.8483460+07:00

```

At the bottom, a message says "Query completed with errors."

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the following SQL code:

```

73 delete SANVD where MASAN='GD'
74
75 --Test BDU04--
76 select MACT, HOTEN, VITRI, DIACHI, MACLB, MAQG, SO from CAUTHU
77
78 select CAUTHU.NGAYSINH from CAUTHU
79
80 update CAUTHU set VITRI = N'Lum banh'
81 where MACT = 01
82
83 select* from HLV_CLB
84
85 select* from TINH

```

In the Messages pane, it shows:

- Msg 230, Level 14, State 1, Line 80
The UPDATE permission was denied on the column 'VITRI' of the object 'CAUTHU', database 'QLBongDa', schema 'dbo'.
- Completion time: 2024-04-13T21:42:48.4984679+07:00

The status bar at the bottom indicates: 119 % | Query completed with errors. LAPTOP-TULM4LVA\MSSQLGR (16...) BDU04 (52) QLBongDa 00:00:00 0 rows

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the same SQL code as the previous screenshot:

```

73 delete SANVD where MASAN='GD'
74
75 --Test BDU04--
76 select MACT, HOTEN, VITRI, DIACHI, MACLB, MAQG, SO from CAUTHU
77
78 select CAUTHU.NGAYSINH from CAUTHU
79
80 update CAUTHU set VITRI = N'Lum banh'
81 where MACT = 01
82
83 select* from HLV_CLB
84
85 select* from TINH

```

In the Messages pane, it shows:

- Msg 229, Level 14, State 5, Line 83
The SELECT permission was denied on the object 'HLV_CLB', database 'QLBongDa', schema 'dbo'.
- Completion time: 2024-04-13T21:43:01.6487107+07:00

The status bar at the bottom indicates: 119 % | Query completed with errors. LAPTOP-TULM4LVA\MSSQLGR (16...) BDU04 (52) QLBongDa 00:00:00 0 rows

The screenshot shows the Object Explorer on the left and a query window on the right. The query window contains the following SQL code:

```
73 delete SANVO where MASAN='GD'
74
75 --Test BDU04--
76 select MACT, HOTEN, VITRI, DIACHI, MACLB, MAQG, SO from CAUTHU
77
78 select CAUTHU.NGAYSINH from CAUTHU
79
80 update CAUTHU set VITRI = N'Lum banh'
81 where MACT = 01
82
83 select* from HLV_CLB
84
85 select* from TINH
```

Messages pane:

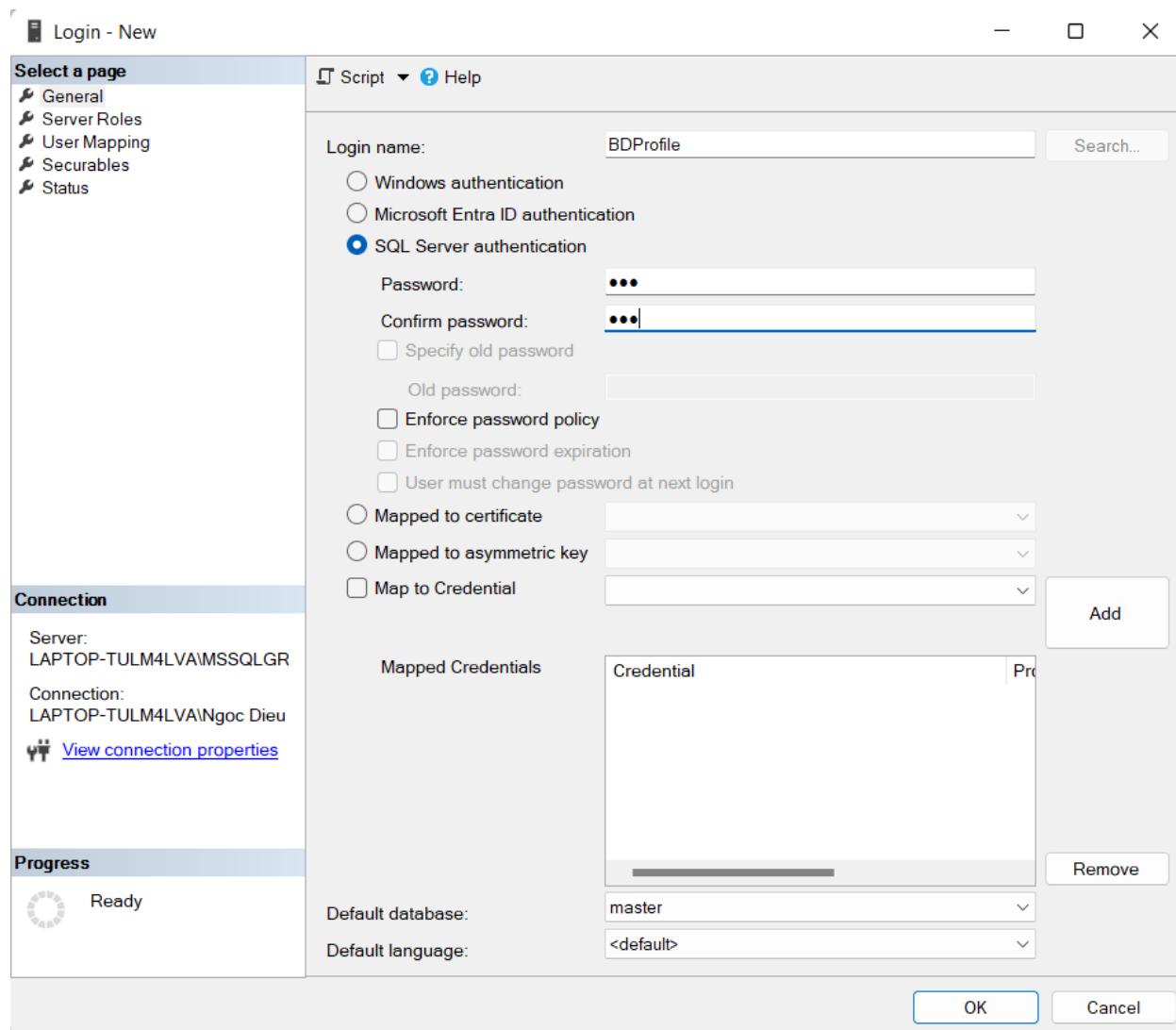
Msg 229, Level 14, State 5, Line 85
The SELECT permission was denied on the object 'TINH', database 'QLBongDa', schema 'dbo'.
Completion time: 2024-04-13T21:49:13.1166001+07:00

Query completed with errors.

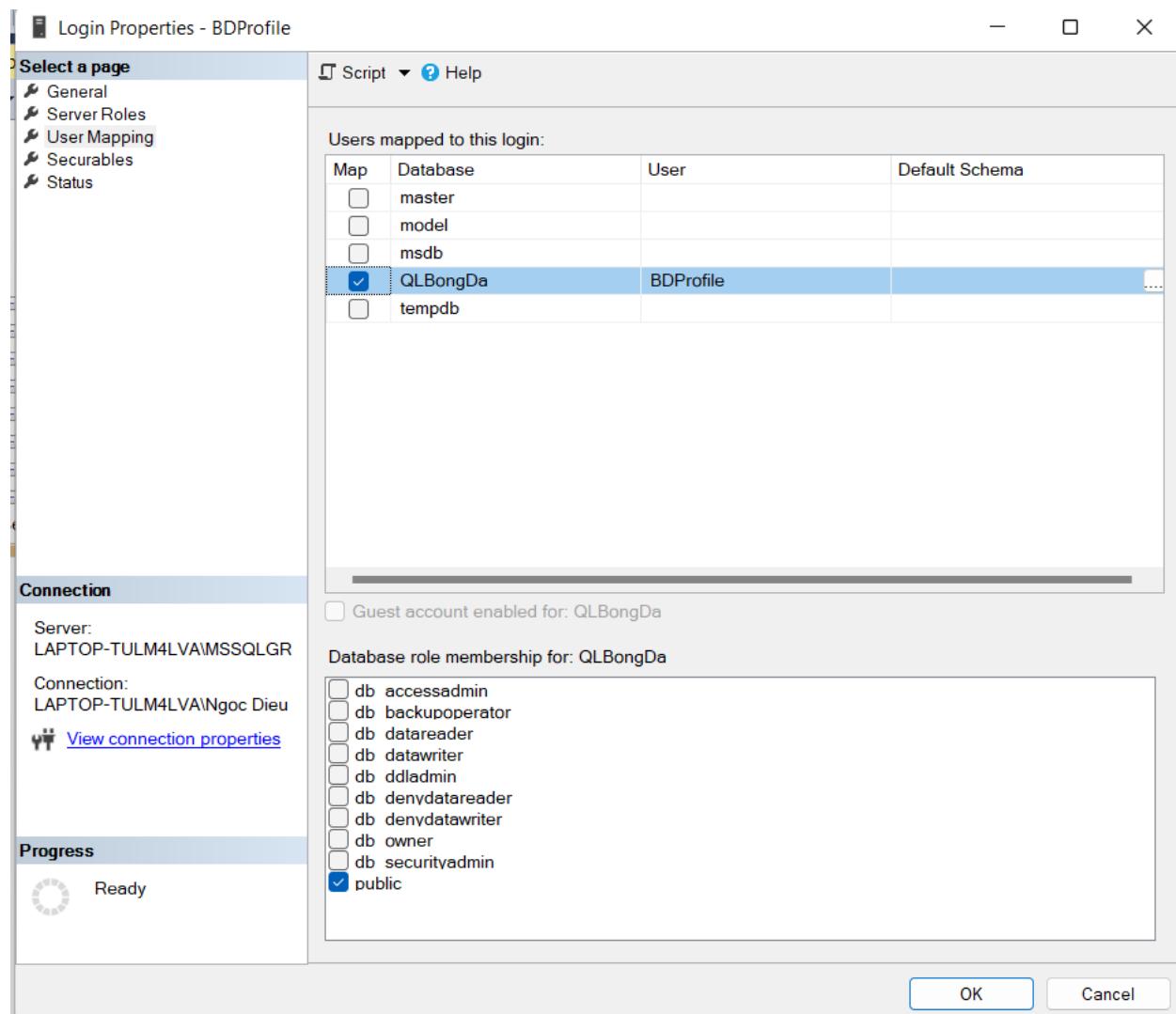
8. BDProfile

8.1. Cài đặt

B1: Tạo user mới với loại ủy quyền là **SQL Server Authentication**



B2: Nháy đúp vô phần **user** BDProfile, chọn **User Mapping**, map với database **QLBongDa** với role **public**



B3: Chạy lệnh với mục đích grant alter **trace** cho user **BDProfile**

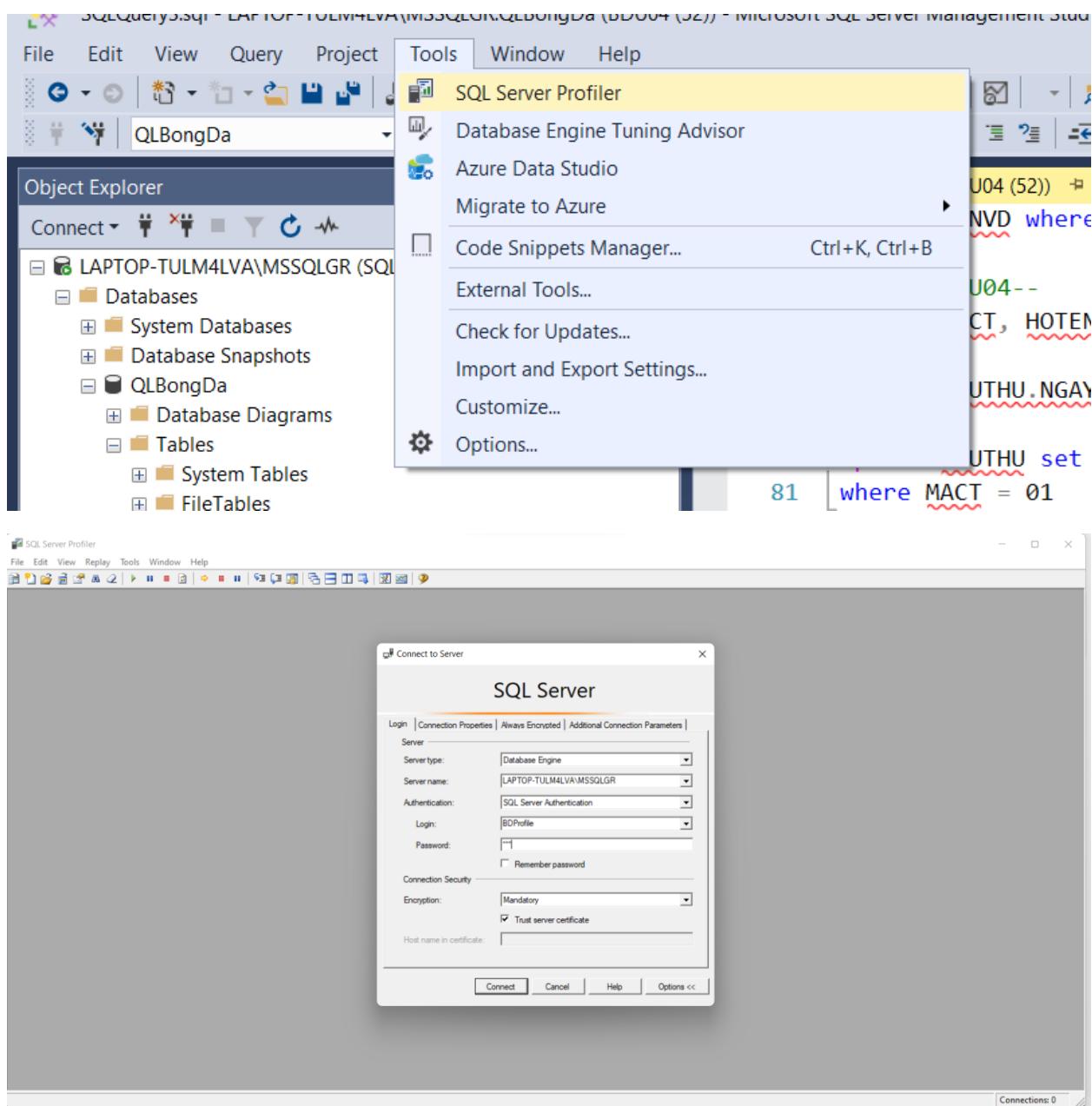
The screenshot shows the SSMS interface. On the left, the Object Explorer pane displays a tree view of database objects under the master database, including tables like HUANLUYENVIEN, QUOCGIA, SANVD, TINH, TRANDAU, and various system objects like Views, External Resources, Synonyms, Programmability, Query Store, Service Broker, Storage, and Security. Under Security > Logins, a list of logins is shown, including BDAdmin, BDDK, BDRead, BDU01, BDU02, BDU03, BDU04, LAPTOP-TULM4LVA\Ngoc Dieu, NT AUTHORITY\SYSTEM, and several service accounts.

In the center, the SQLQuery2.sql - LA...VA\Ngoc Dieu (60)* window contains the following T-SQL code:

```
use master;
grant alter trace to BDProfile;
go
```

The Messages pane at the bottom right shows the output of the command: "Commands completed successfully." and the completion time: "Completion time: 2024-04-12T22:04:31.7633519+07:00".

8.2. Kiểm tra



SQL Server Profiler

File Edit View Replay Tools Window Help

Untitled - 1 (LAPTOP-TULM4LVA\MSQLGR)

Trace Properties

General | Events Selection |

Trace name: Untitled - 1

Trace provider name: LAPTOP-TULM4LVA\MSQLGR

Trace provider type: Microsoft SQL Server "2022" version: 16.0.1000

Use the template: Standard (default)

Save to file:

- Set maximum file size (MB): 5
- Enable file rollover
- Server processes trace data

Save to table:

- Set maximum rows (in thousands): 1

Enable trace stop time: 4/13/2024 10:45:11 PM

- Set trace duration (in minutes): 60

Run Cancel Help

Connections: 1

SQL Server Profiler

File Edit View Replay Tools Window Help

Untitled - 1 (LAPTOP-TULM4LVA\MSQLGR)

EventClass	TextData	ApplicationName	NTUserName	LoginName	CPU	Reads	Writes	Duration	ClientProcessID	SPID	StartTime
Trace Start											2024-04-13 21:45:44...
ExistingConnection	-- network protocol: LPC set quoted...	SQLServerCEIP	SQLTELE...	NT SER...					11204	51	2024-04-13 21:41:02...
ExistingConnection	-- network protocol: LPC set quoted...	Microsoft SQ...	BDU04						5668	52	2024-04-13 21:41:48...
ExistingConnection	-- network protocol: LPC set quoted...	Microsoft SQ...	BDU01						5668	66	2024-04-13 21:37:15...
ExistingConnection	-- network protocol: LPC set quoted...	Microsoft SQ...	BDU04						5668	67	2024-04-13 21:40:08...
ExistingConnection	-- network protocol: LPC set quoted...	Microsoft SQ...	BDU04						5668	72	2024-04-13 21:39:51...
ExistingConnection	-- network protocol: LPC set quoted...	Microsoft SQ...	BDU04						5668	73	2024-04-13 21:40:24...
ExistingConnection	-- network protocol: LPC set quoted...	Microsoft SQ...	BDU04						5668	74	2024-04-13 21:40:24...
Audit Logout		Microsoft SQ...	BDU04	31	2169	0	342693		5668	67	2024-04-13 21:40:08...
Audit Logout		SQLServerCEIP	SQLTELE...	NT SER...	78	938	8	290160	11204	51	2024-04-13 21:41:02...
Audit Login	-- network protocol: LPC set quoted...	SQLServerCEIP	SQLTELE...	NT SER...					11204	51	2024-04-13 21:46:02...
SQL:BatchStarting	SET DEADLOCK_PRIORITY -10	SQLServerCEIP	SQLTELE...	NT SER...					11204	51	2024-04-13 21:46:02...
SQL:BatchCompleted	SET DEADLOCK_PRIORITY -10	SQLServerCEIP	SQLTELE...	NT SER...	0	0	0	11	11204	51	2024-04-13 21:46:02...
SQL:BatchStarting	SELECT target_data FROM sy...	SQLServerCEIP	SQLTELE...	NT SER...					11204	51	2024-04-13 21:46:02...
SQL:BatchCompleted	SELECT target_data FROM sy...	SQLServerCEIP	SQLTELE...	NT SER...	47	502	0	64	11204	51	2024-04-13 21:46:02...
Audit Logout		SQLServerCEIP	SQLTELE...	NT SER...	47	689	0	110	11204	51	2024-04-13 21:46:02...
RPC:Completed	exec sp_reset_connection	SQLServerCEIP	SQLTELE...	NT SER...	0	0	0	0	11204	51	2024-04-13 21:46:02...
Audit Login	-- network protocol: LPC set quoted...	SQLServerCEIP	SQLTELE...	NT SER...					11204	51	2024-04-13 21:46:02...
SQL:BatchStarting	SET DEADLOCK_PRIORITY -10	SQLServerCEIP	SQLTELE...	NT SER...					11204	51	2024-04-13 21:46:02...
SQL:BatchCompleted	SET DEADLOCK_PRIORITY -10	SQLServerCEIP	SQLTELE...	NT SER...	0	0	0	0	11204	51	2024-04-13 21:46:02...
SNI:BatchStarting	if exists(select * from sys.server...	SNI ServerCFTP	SNI TPI F...	NT SER...					11204	51	2024-04-13 21:46:02...
											11204

```

if exists(select * from sys.server_event_sessions where name='telemetry_xevents')
    drop event session telemetry_xevents on server
create event session telemetry_xevents on server
    ADD EVENT [sqlserver].[error_reported]
        WHERE severity = 16
        OR (error_number = 18456
            OR error_number = 17893 OR error_number = 701 OR error_number = 802 OR error_number = 8645 OR error_number = 8651
            OR error_number = 8997 OR error_number = 8992 OR error_number = 41354 OR error_number = 41359 OR error_number = 41367
            OR error_number = 41384 OR error_number = 41336 OR error_number = 41309 OR error_number = 41312 OR error_number = 41313
            OR error_number = 33065 OR error_number = 33066)
),
ADD EVENT [sqlserver].[missing_column_statistics],
ADD EVENT [sqlserver].[missing_join_predicate],

```

Trace is running.

Ln 22, Col 1 Rows: 22