

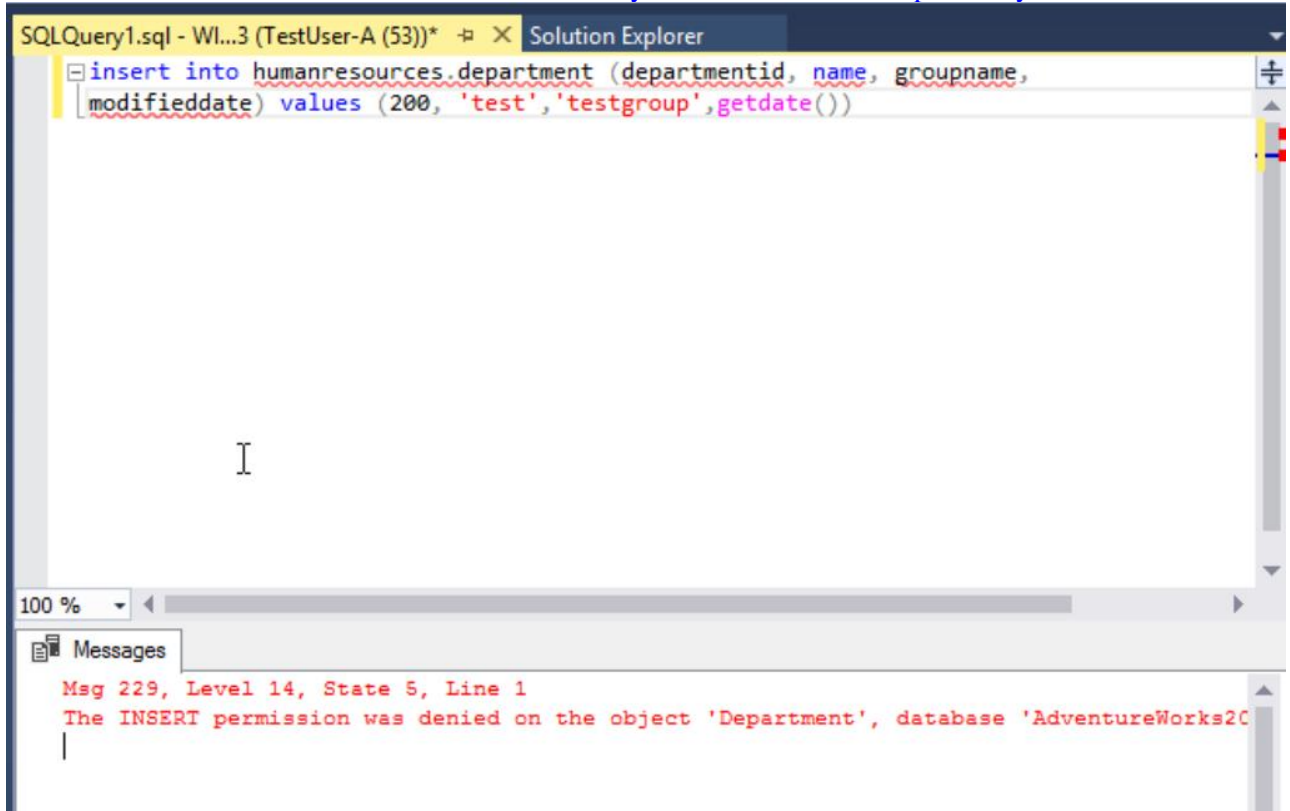
Homework 5: User Management

Task 4. Assigning User Mappings to Fixed Database Roles

A. Assigning a user to a database role

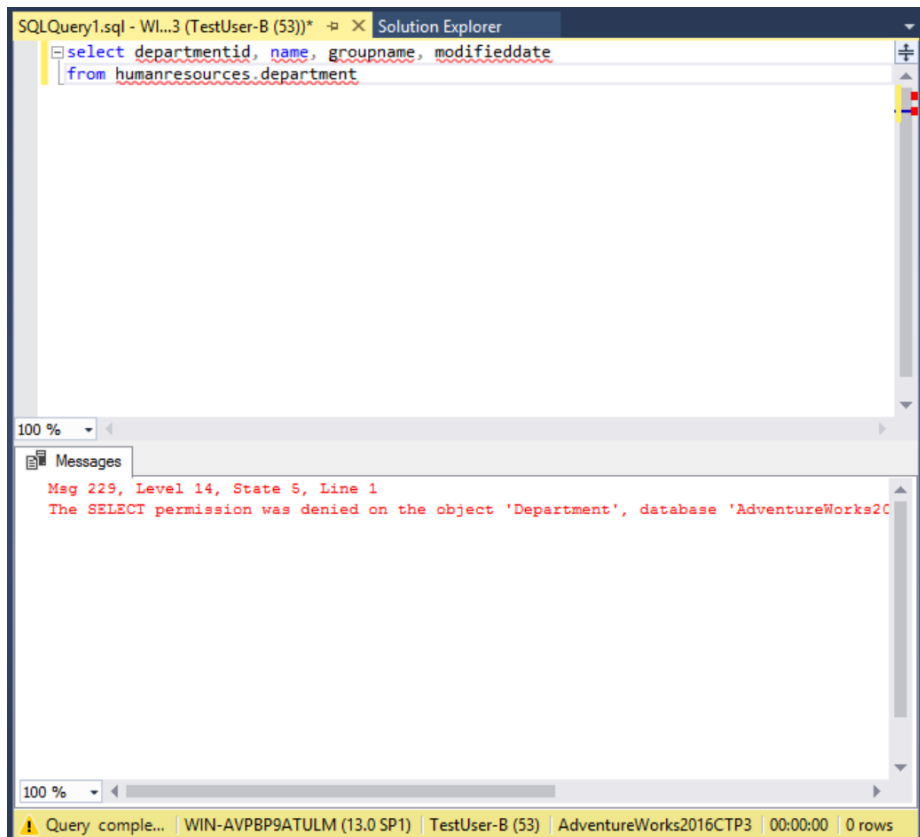
B. Verifying the results

5) Does it fail? Show the result in a screenshot. Describe your observation and explain why it fails.



It fails because TestUser-A does not have write permissions for the AdventureWorks2016 database.

10) Does it fail? Show the result in a screenshot. Describe your observation and explain why it fails.



It failed because TestUser-B's account permissions doesn't allow read access for the AdventureWorks2016 database.

Task 5. Creating a Custom Database Role

A. Creating a custom database role

B. Verifying results

4) Does it work? Show the result in a screenshot. Describe your observation and explain why it works.

SQLQuery1.sql - Wl...3 (TestUser-C (56))* X Solution Explorer

```

use AdventureWorks2016CTP3
select * from humanresources.department

```

100 %

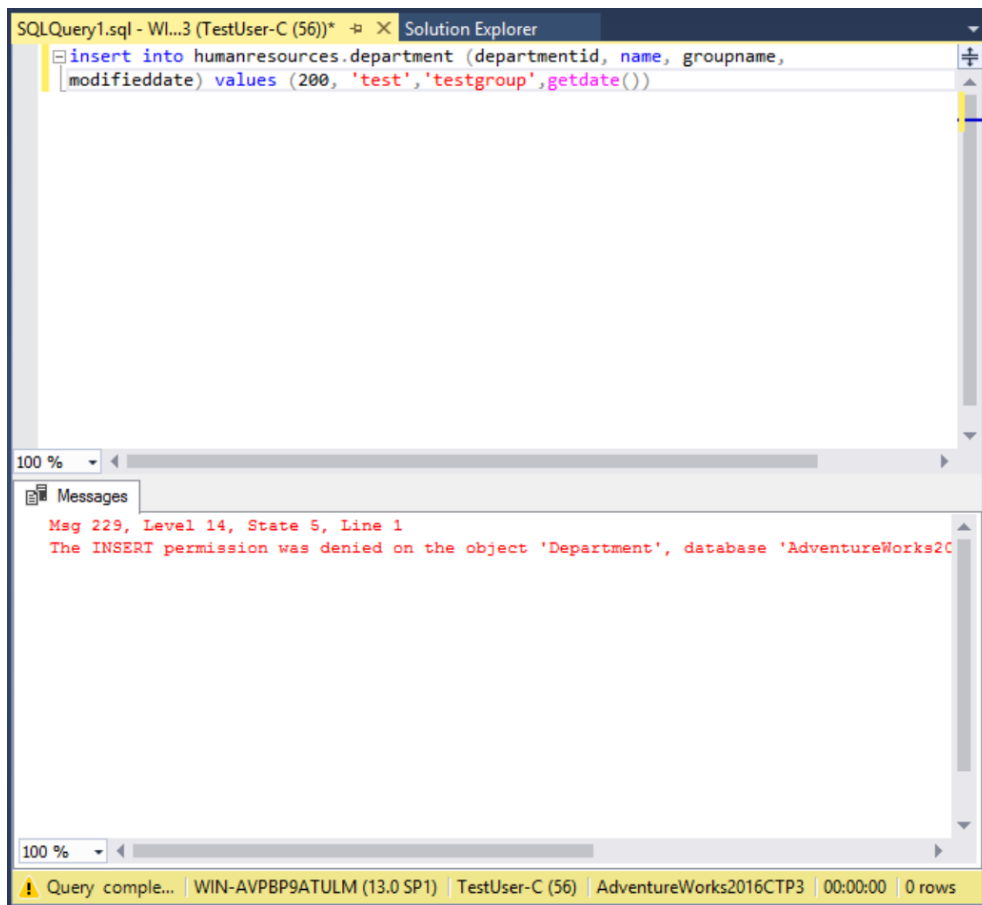
Results Messages

	DepartmentID	Name	GroupName	ModifiedDate
1	1	Engineering	Research and Development	2008-04-30 00:00:00.000
2	2	Tool Design	Research and Development	2008-04-30 00:00:00.000
3	3	Sales	Sales and Marketing	2008-04-30 00:00:00.000
4	4	Marketing	Sales and Marketing	2008-04-30 00:00:00.000
5	5	Purchasing	Inventory Management	2008-04-30 00:00:00.000
6	6	Research and Development	Research and Development	2008-04-30 00:00:00.000
7	7	Production	Manufacturing	2008-04-30 00:00:00.000
8	8	Production Control	Manufacturing	2008-04-30 00:00:00.000
9	9	Human Resources	Executive General and Administration	2008-04-30 00:00:00.000
10	10	Finance	Executive General and Administration	2008-04-30 00:00:00.000
11	11	Information Services	Executive General and Administration	2008-04-30 00:00:00.000

Query execu... WIN-AVPBP9ATULM (13.0 SP1) TestUser-C (56) AdventureWorks2016CTP3 00:00:00 16 rows

The query worked because we added read permissions to TestUser-C's account by granting explicit permissions to use the SELECT command for the account.

5) Does it fail? Show the result in a screenshot. Describe your observation and explain why it fails.



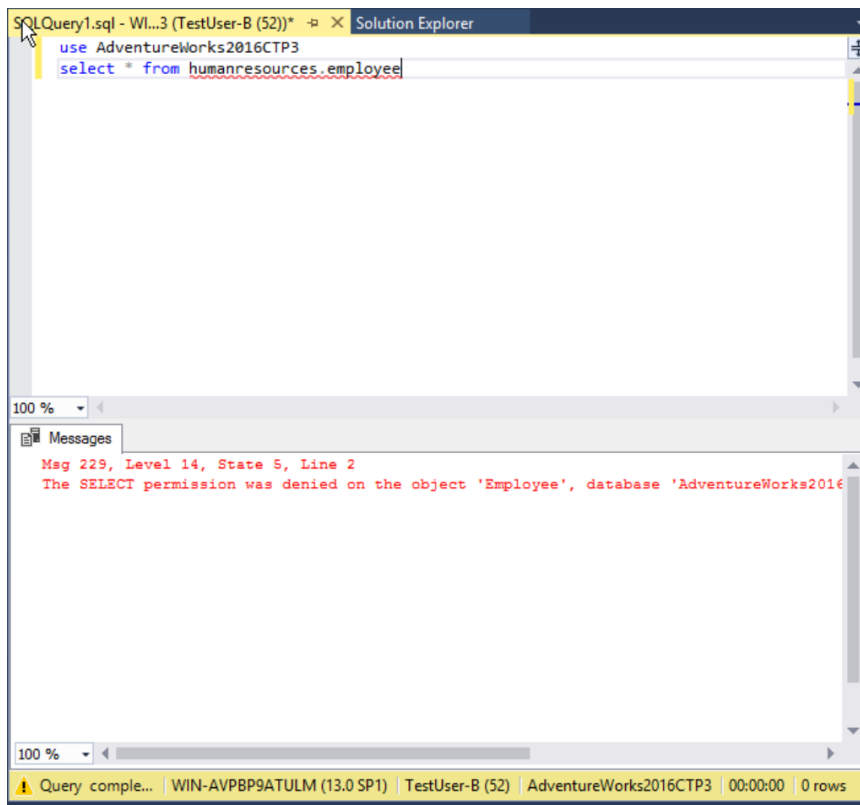
The query failed due to TestUser-C's account not having write permissions for the database.

Task 6. Creating an Application Role

A. Creating an Application Role

B. Verifying Results

2) Does it fail? Show the result in a screenshot. Describe your observation and explain why it fails.



The query failed because TestUser-B needs to be added to the EntAppRole application group to read the humanresources.employee table.

4) Does it work? Show the result in a screenshot. You have to click on Results to view the results. Describe your observation and explain why it works.

The screenshot shows a SQL Server Enterprise Manager window with a query executed. The query is `select * from humanresources.employee`. The results are displayed in a table with the following columns: BusinessEntityID, NationalIDNumber, LoginID, OrganizationNode, OrganizationLevel, and JobTitle. The table contains 10 rows of data.

	BusinessEntityID	NationalIDNumber	LoginID	OrganizationNode	OrganizationLevel	JobTitle
1	1	295847284	adventure-works\ken0	NULL	NULL	Chief Executive Officer
2	2	245797967	adventure-works\ken0	0x58	1	Vice President
3	3	509647174	adventure-works\roberto0	0x5AC0	2	Engineer
4	4	112457891	adventure-works\rob0	0x5AD6	3	Senior Technician
5	5	695256908	adventure-works\gail0	0x5ADA	3	Design Engineer
6	6	998320692	adventure-works\jossef0	0x5ADE	3	Design Engineer
7	7	134969118	adventure-works\dylan0	0x5AE1	3	Researcher
8	8	811994146	adventure-works\diane1	0x5AE158	4	Researcher
9	9	658797903	adventure-works\gigi0	0x5AE168	4	Researcher
10	10	879342154	adventure-works\michael6	0x5AE178	4	Researcher

The status bar at the bottom indicates: Query executed successfully | WIN-AVPBP9ATULM (13.0 SP1) | TestUser-B (52) | AdventureWorks2016CTP3 | 00:00:00 | 290 rows

The query worked since the last command (`sp_setapprole @rolename='EntAppRole', @password='Pa$$w0rd'`) gave permissions for us to be able to read the `humanresources.employee` table.

Task 7. Assigning Permissions

9) Does it work? Show the result in a screenshot. Describe your observation and explain why it works.

SQLQuery1.sql - Wl...3 (TestUser-A (54)) * Solution Explorer

```
use AdventureWorks2016CTP3
select * from person.address
```

100 %

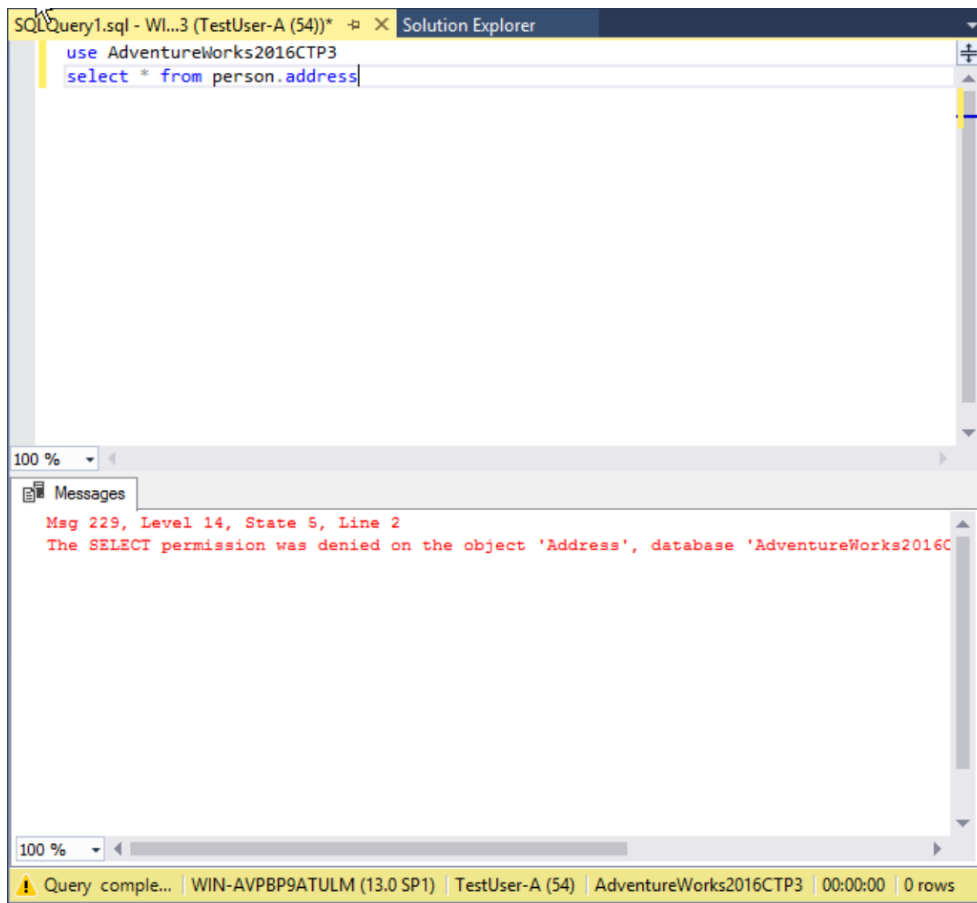
Results Spatial results Messages

	AddressID	AddressLine1	AddressLine2	City	StateProvinceID	PostalCode	SpatialLocation
1	1	1970 Napa Ct.	NULL	Bothell	79	98011	0xE6100000010CAE8F
2	2	9833 Mt. Dias Blv.	NULL	Bothell	79	98011	0xE6100000010CD6F7
3	3	7484 Roundtree Drive	NULL	Bothell	79	98011	0xE6100000010C18E3
4	4	9539 Glenside Dr	NULL	Bothell	79	98011	0xE6100000010C813A
5	5	1226 Shoe St.	NULL	Bothell	79	98011	0xE6100000010C61C6
6	6	1399 Firestone Drive	NULL	Bothell	79	98011	0xE6100000010CE0B4
7	7	5672 Hale Dr.	NULL	Bothell	79	98011	0xE6100000010C18E3
8	8	6387 Scenic Avenue	NULL	Bothell	79	98011	0xE6100000010C0029
9	9	8713 Yosemite Ct.	NULL	Bothell	79	98011	0xE6100000010C6A8C
10	10	250 Race Court	NULL	Bothell	79	98011	0xE6100000010C219C

Query execution successful | WIN-AVPBP9ATULM (13.0 SP1) | TestUser-A (54) | AdventureWorks2016CTP3 | 00:00:00 | 19614 rows

The query works due to TestUser-A being given explicit read permissions for the person.address table

13) Run the previous query. Show the result in a screenshot. Describe your observation and explain why it fails.



Query fails due to explicit read permissions being taken for TestUser-A reading the person.address table

15) Run the previous query. Show the result in a screenshot. Describe your observation and explain why it works.

SQLQuery1.sql - Wl...3 (TestUser-A (54))* X Solution Explorer

```
use AdventureWorks2016CTP3
select * from person.address
```

100 %

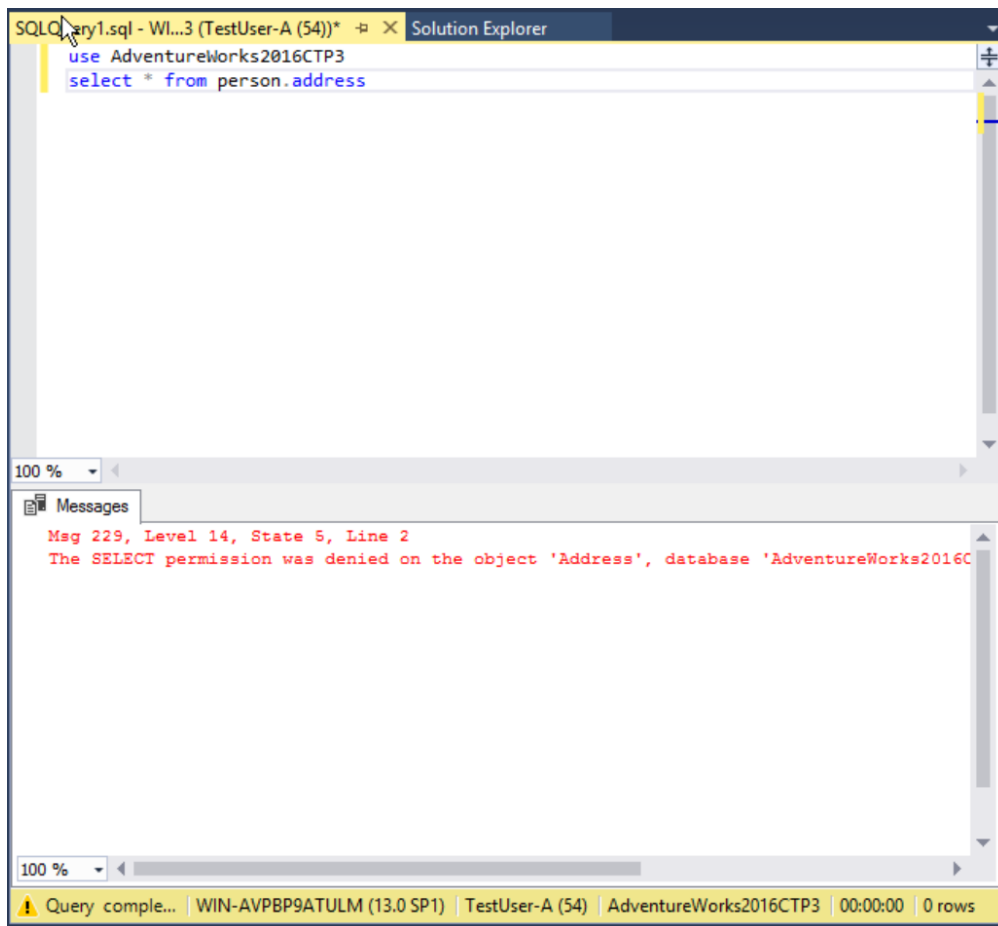
Results Spatial results Messages

	AddressID	AddressLine1	AddressLine2	City	StateProvinceID	PostalCode	SpatialLocation
1	1	1970 Napa Ct.	NULL	Bothell	79	98011	0xE6100000010CAE8E
2	2	9833 Mt. Dias Blv.	NULL	Bothell	79	98011	0xE6100000010CD6F7
3	3	7484 Roundtree Drive	NULL	Bothell	79	98011	0xE6100000010C18E3
4	4	9539 Glenside Dr	NULL	Bothell	79	98011	0xE6100000010C813A
5	5	1226 Shoe St.	NULL	Bothell	79	98011	0xE6100000010C61C6
6	6	1399 Firestone Drive	NULL	Bothell	79	98011	0xE6100000010CE0B4
7	7	5672 Hale Dr.	NULL	Bothell	79	98011	0xE6100000010C18E3
8	8	6387 Scenic Avenue	NULL	Bothell	79	98011	0xE6100000010C0029
9	9	8713 Yosemite Ct.	NULL	Bothell	79	98011	0xE6100000010C6A8C
10	10	250 Race Court	NULL	Bothell	79	98011	0xE6100000010C219C
11	11	1310 L...	NULL	Bothell	79	98011	0xE6100000010C005F

Query ex... WIN-AVPBP9ATULM (13.0 SP1) TestUser-A (54) AdventureWorks2016CTP3 00:00:00 19614 rows

Query succeeded since TestUser-A was given a role that allows them to read all tables within the database. (db_datareader)

19) Run the previous query. Show the result in a screenshot. Describe your observation and explain why it fails.



Query failed due to TestUser-A having the explicit deny access control enabled for the person.address table