LAB 11

**1.** Write a script that creates a user-defined database role named PaymentEntry in the AP database. Give UPDATE permission to the new role for the Vendors and Invoices table, UPDATE and INSERT permission for the InvoiceLineItems table, and SELECT permission for all user tables.

**Comment:**

* In the AP database, this script creates a user-defined database role named PaymentEntry.
* The new role was granted UPDATE permission on the Vendors and Invoices table, UPDATE and INSERT permission on the InvoiceLineItems table, and SELECT permission on all user tables using GRANT.

**Query:**

Use AP;

Create Role PaymentEntry;

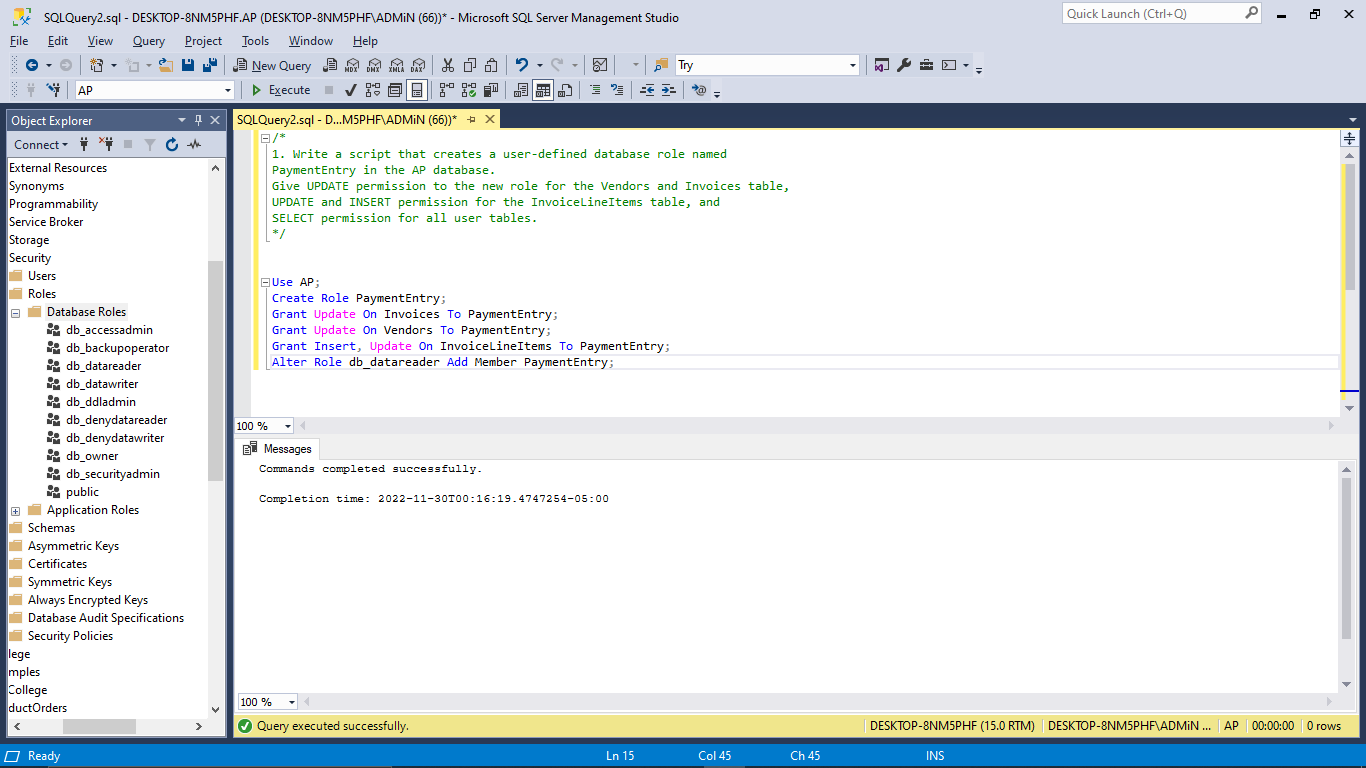
Grant Update On Invoices To PaymentEntry;

Grant Update On Vendors To PaymentEntry;

Grant Insert, Update On InvoiceLineItems To PaymentEntry;

Alter Role db\_datareader Add Member PaymentEntry;

**Output:**

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**2.** Write a script that (1) creates a login ID named “Fall2022” with the password “12345678”; (2) sets the default database for the login to the AP database; (3) creates a user named “James” for the login; and (4) assigns the user to the PaymentEntry role you created in question 1.

**Comment:**

* The query below generates a login ID called "Fall2022" with the password "12345678." Establishes the AP database as the default database for the login.
* Creates a user called "James" for the login; and assigns the user to the PaymentEntry role.

**Query:**

Use AP;

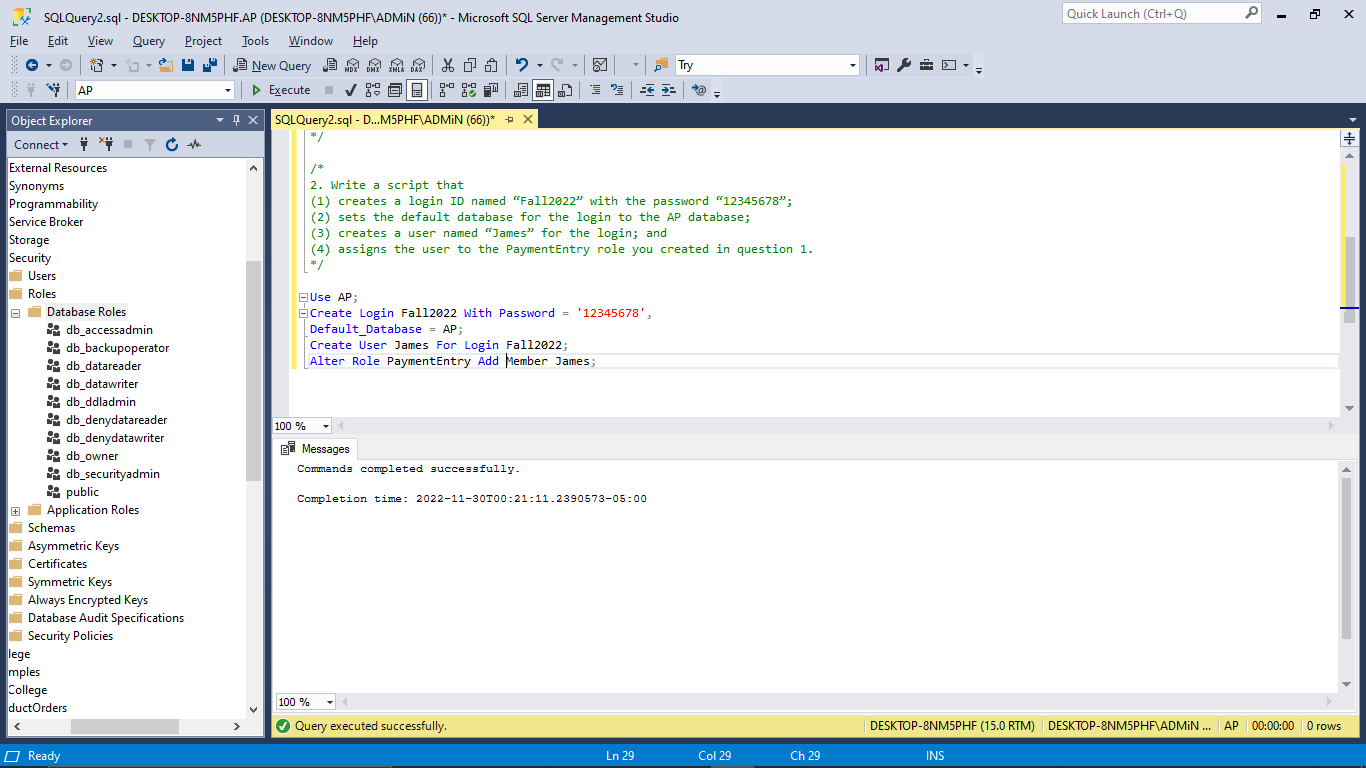
Create Login Fall2022 With Password = '12345678',

Default\_Database = AP;

Create User James For Login Fall2022;

Alter Role PaymentEntry Add Member James;

**Output:**

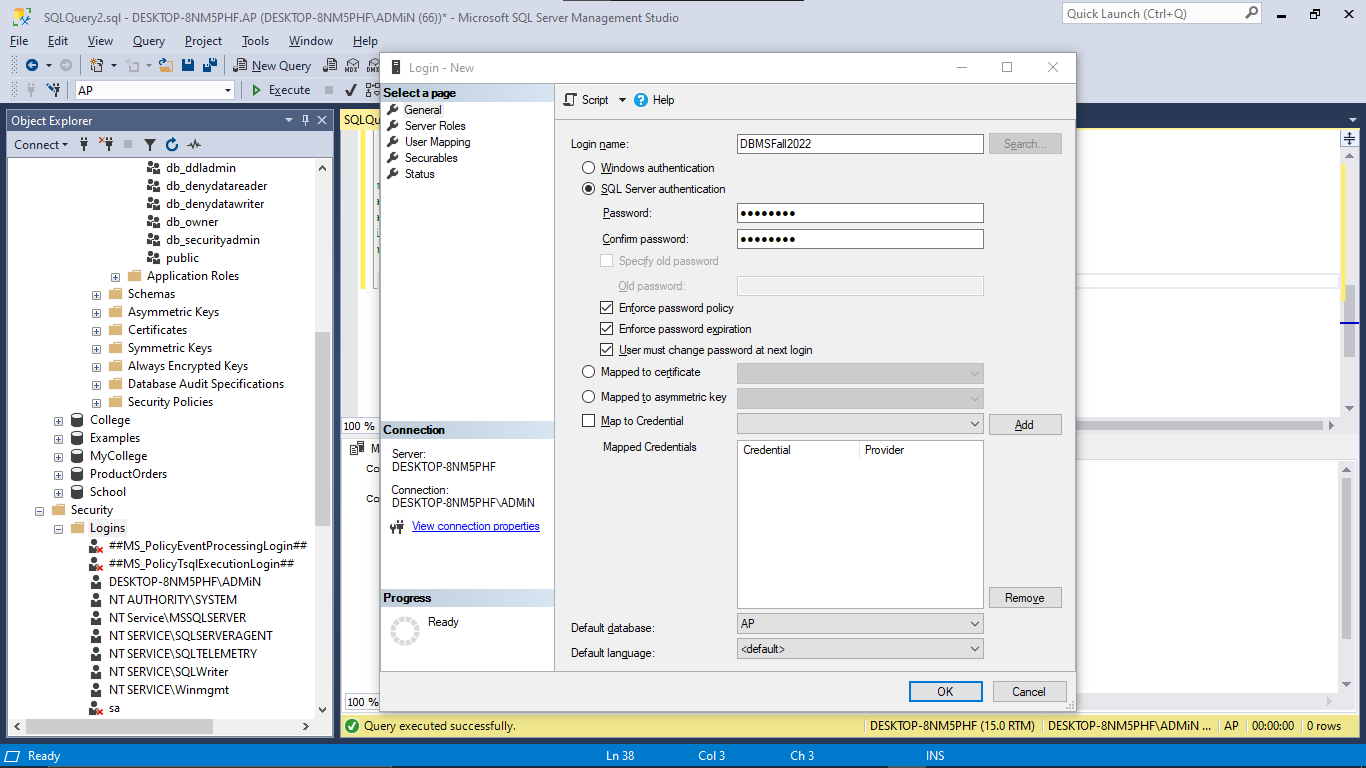
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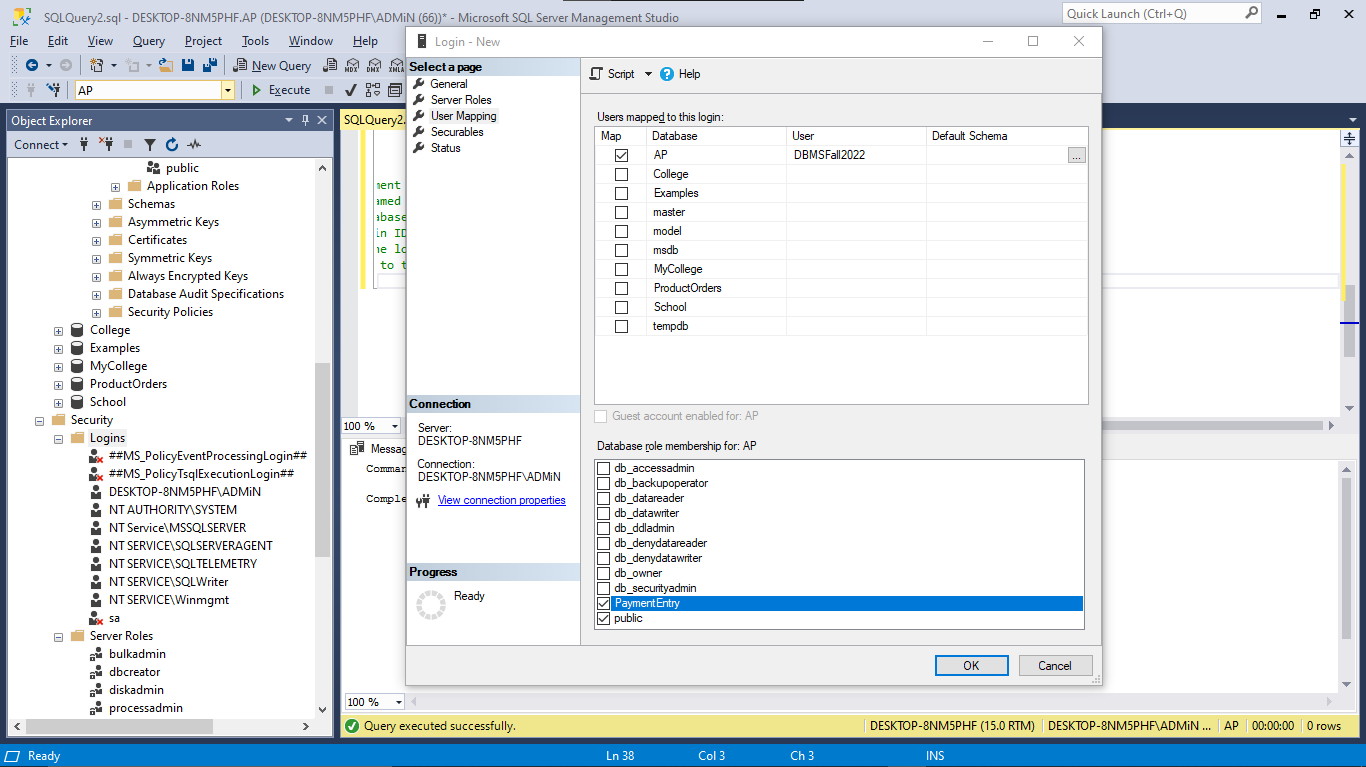
**3.** Using the Management Studio (do not write a query), create a login ID named “DBMSFall2022” with the password “Fall2022” and set the default database to the AP database. Then, grant the login ID access to the AP database, create a user for the login ID named “Hanna” and assign the user to the PaymentEntry role you created in question 1.

**Comments:**

* A login ID and password with the names "DBMSFall2022" and "Fall2022," respectively, were produced using Management Studio.
* The default database setting was set to the AP database.
* After giving the login ID access to the AP database, create a user for the login ID called "Hanna" and assign the user to the PaymentEntry role.

**Output:**

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**4.** Write a script that (1) creates a schema named as your own name, (2) transfers the table named ContactUpdates from the dbo schema to your schema, (3) assigns the Admin schema as the default schema for the user named ‘James’ that you created in question 2, (4) grants all standard privileges except for REFERENCES and ALTER to ‘James’ for your schema.

**Comments:**

* The query below generates a schema with the name KavyaShah and moves the ContactUpdates table from the dbo schema to this schema
* Sets the Admin schema as the default schema for the user "James," and grants "James" access to all normal schema capabilities except REFERENCES and ALTER.

**Query:**

Use AP;

Go

Create Schema KavyaShah;

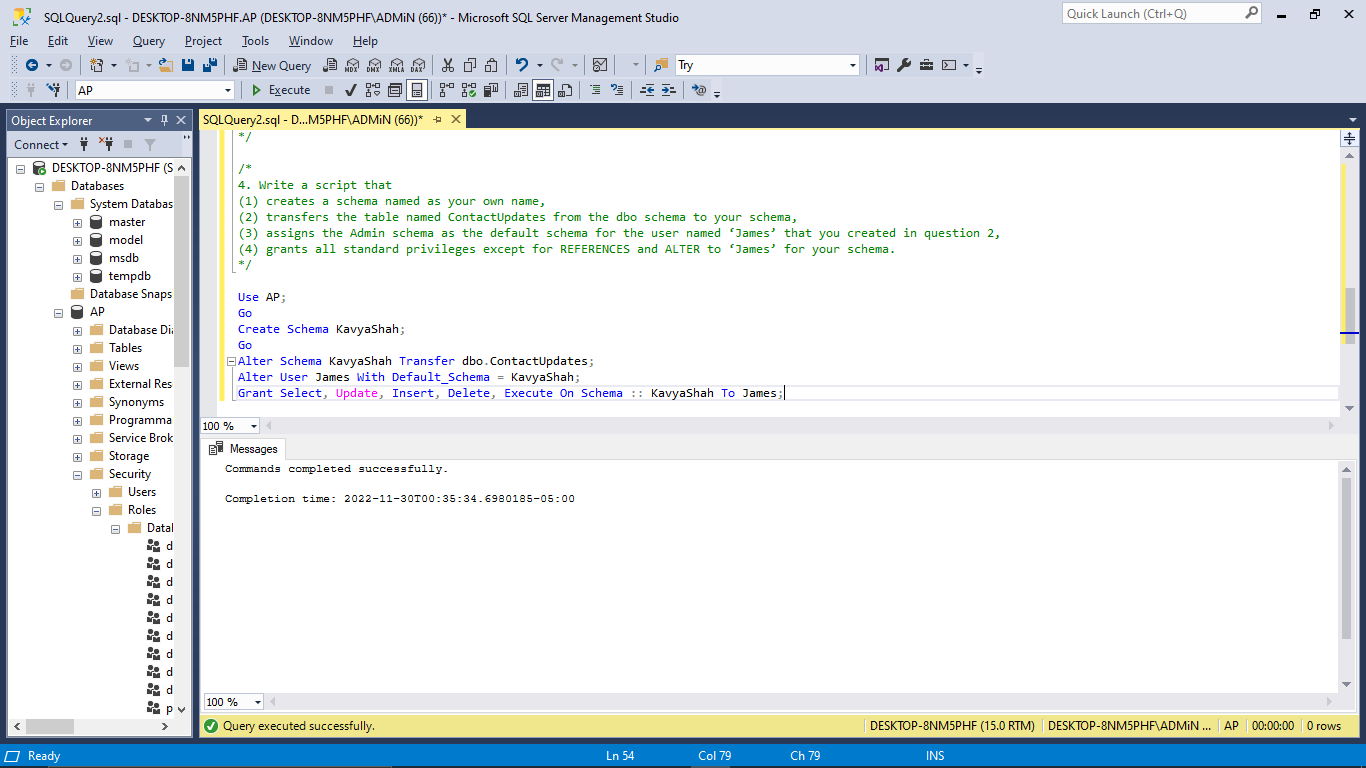
Go

Alter Schema KavyaShah Transfer dbo.ContactUpdates;

Alter User James With Default\_Schema = KavyaShah;

Grant Select, Update, Insert, Delete, Execute On Schema :: KavyaShah To James;

**Output:**

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## Remarks for the Lab:

This Lab consisted the utilization of Transact SQL statements and SQL Server to grant the security permissions to the new user.