# Lab 10: Transactions, Locking   Solution

1. Write a set of action queries coded as a transaction to reflect the following change: United Parcel Service has been purchased by Federal Express Corporation and the new company is named FedUp. Rename one of the vendors and delete the other after updating the VendorID column in the Invoices table. Use SELECT statement to verify the results.
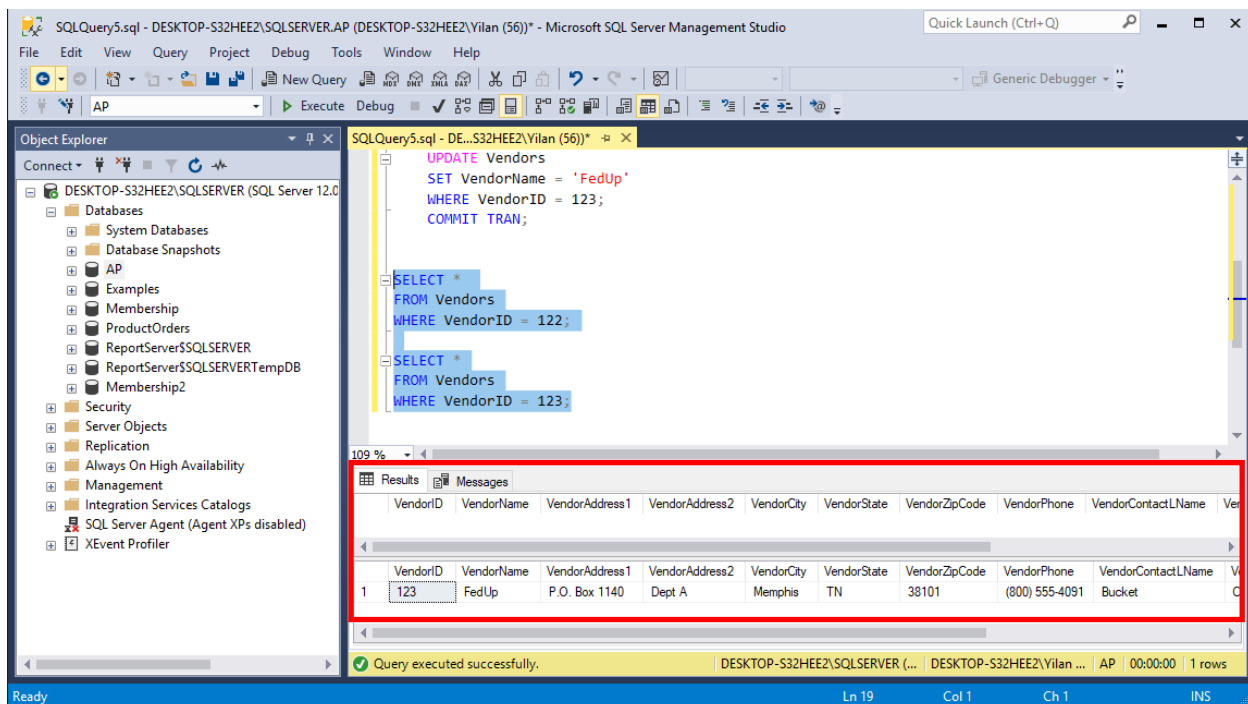
```
IF  EXISTS (SELECT * FROM sys.triggers
        WHERE object_id = OBJECT_ID('Invoices_UPDATE_Shipping'))
DROP TRIGGER [dbo].[Invoices_UPDATE_Shipping];
GO
BEGIN TRAN;
UPDATE Invoices
SET VendorID = 123
WHERE VendorID = 122;

DELETE Vendors
WHERE VendorID = 122;

UPDATE Vendors
SET VendorName = 'FedUp'
WHERE VendorID = 123;
COMMIT TRAN;
```
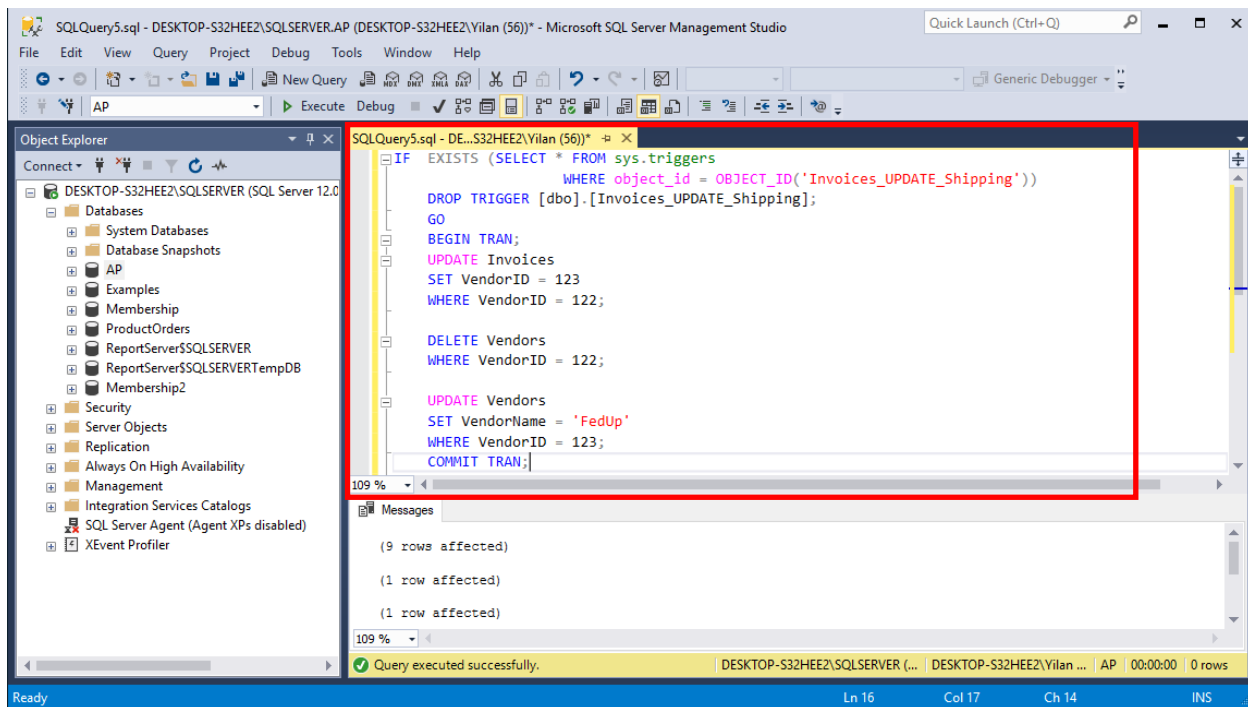
Verify results:

2. Write a set of action queries coded as a transaction to move rows from the Invoices table to the InvoiceArchive table. Insert all paid invoices from Invoices into InvoiceArchive, but only if the invoice doesn't already exist in the InvoiceArchive table. Then, delete all paid invoices from the Invoices table, but only if the invoice exists in the InvoiceArchive table. Use SELECT statement to verify the results.

```
BEGIN TRAN;
INSERT InvoiceArchive
SELECT Invoices.*
FROM Invoices LEFT JOIN InvoiceArchive
    ON Invoices.InvoiceID = InvoiceArchive.InvoiceID
WHERE Invoices.InvoiceTotal - Invoices.CreditTotal -
        Invoices.PaymentTotal = 0 AND
        InvoiceArchive.InvoiceID IS NULL;

DELETE Invoices
WHERE InvoiceID IN
        (SELECT InvoiceID
    FROM InvoiceArchive);
COMMIT TRAN;
```
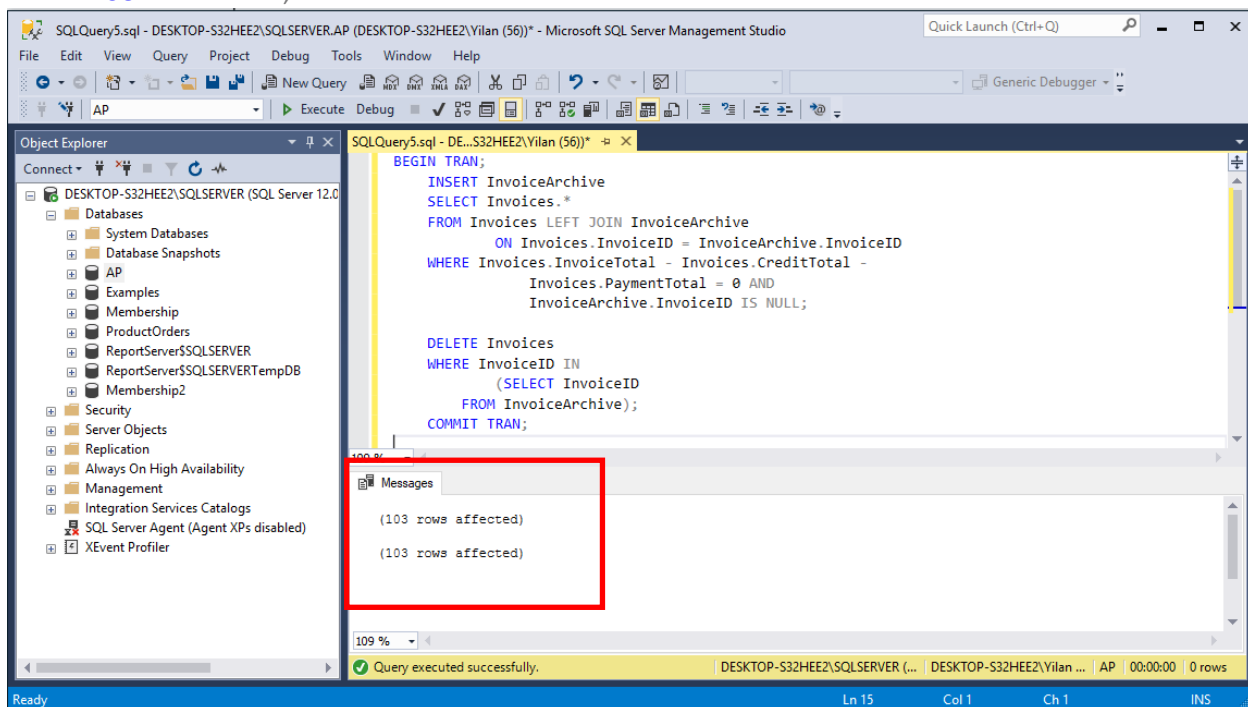
```
SELECT *
FROM Invoices;
SELECT *
FROM InvoiceArchive;

SELECT *
FROM Invoices JOIN InvoiceArchive
ON Invoices.InvoiceID = InvoiceArchive.InvoiceID;
```


No joined results in Invoices table and InvoiceArchive.