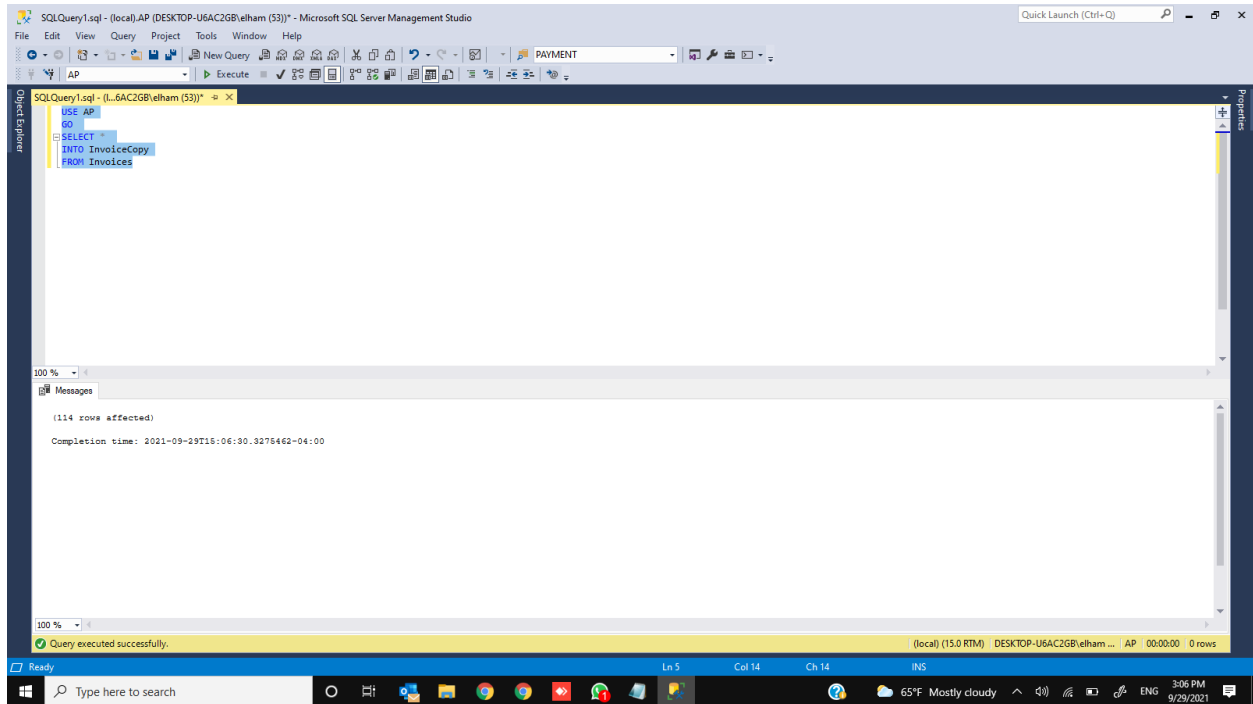
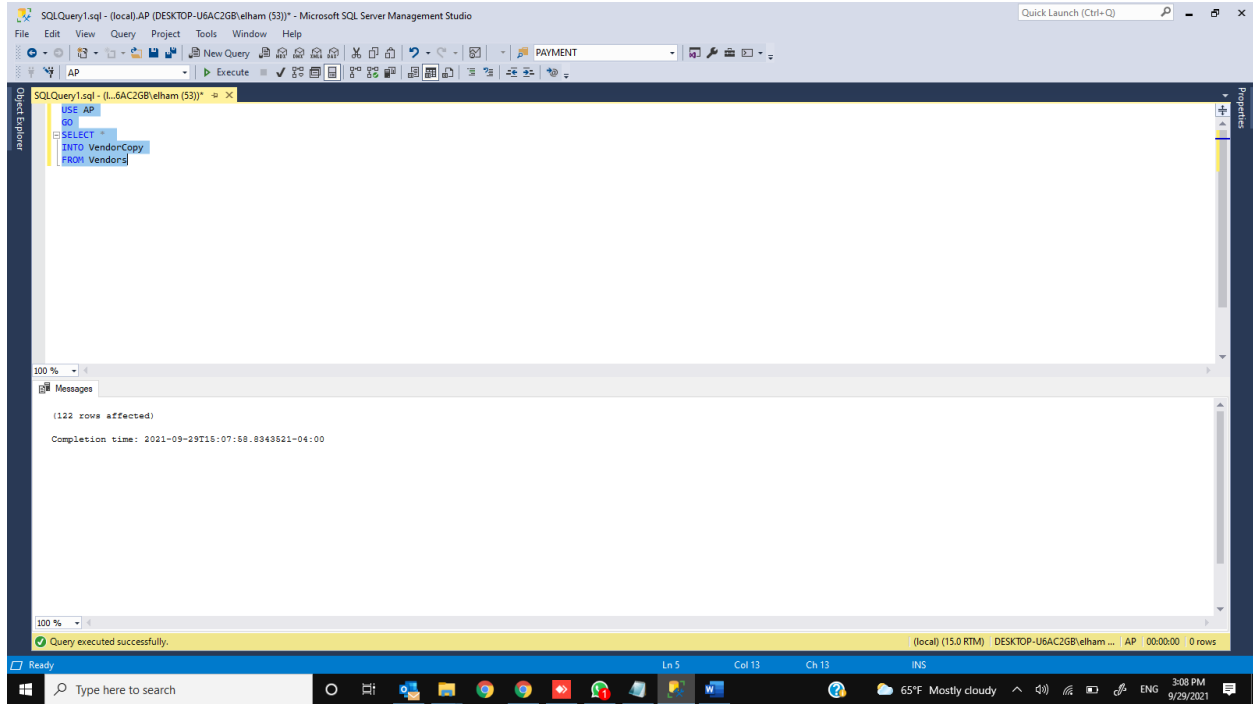


A1:

```
USE AP
GO
SELECT *
INTO InvoiceCopy
FROM Invoices
```



```
USE AP
GO
SELECT *
INTO VendorCopy
FROM Vendors
```



A2:

```
SELECT * FROM Invoicecopy;
```

SQLQuery1.sql - (local)AP (DESKTOP-U6AC2GB)\eham (531)* - Microsoft SQL Server Management Studio

Quick Launch (Ctrl-Q)

FileEditViewQueryProjectToolsWindowHelp

</

```
INSERT InvoiceCopy(VendorID , TermsID, PaymentTotal , InvoiceDate , InvoiceTotal ,  
InvoiceNumber , InvoiceDueDate , CreditTotal)  
VALUES (115,2,2.50, '2015-08-24',400.3, 'CM-004-400', '2015-09-01' , 4.99)
```

The screenshot shows the SQL Server Management Studio interface. The query editor contains the following SQL statement:
`INSERT InvoiceCopy(VendorID , TermsID, PaymentTotal , InvoiceDate , InvoiceTotal ,
InvoiceNumber , InvoiceDueDate , CreditTotal)
VALUES (115,2,2.50, '2015-08-24',400.3, 'CM-004-400', '2015-09-01' , 4.99)`
The Messages pane shows the following output:
(1 row affected)
Completion time: 2021-09-29T16:11:19.8890866-04:00
The status bar at the bottom indicates 'Query executed successfully.' and '0 rows'.

```
SELECT * FROM Invoicecopy;
```

SQLQuery1.sql - (local)\AP (DESKTOP-U6AC2GB)\elham (531)* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

SQLQuery1.sql - (L:\AC2GB)\elham (531)*

```
SELECT * FROM Invoicecopy;
```

100 %

Results Messages

InvoiceID	VendorID	InvoiceNumber	InvoiceDate	InvoiceTotal	PaymentTotal	CreditTotal	TermsID	InvoiceDueDate	PaymentDate
102	102	110	P-9608	2021-03-23 00:00:00	20551.18	0.00	1200.00	3	2021-04-22 00:00:00
103	103	122	989319-417	2021-03-23 00:00:00	2051.59	0.00	3	2021-04-22 00:00:00	2021-04-24 00:00:00
104	104	123	263253243	2021-03-23 00:00:00	44.44	44.44	0.00	3	2021-04-22 00:00:00
105	105	106	9982771	2021-03-24 00:00:00	503.20	0.00	0.00	3	2021-04-23 00:00:00
106	106	110	0-2060	2021-03-24 00:00:00	23517.58	21221.63	2295.95	3	2021-04-23 00:00:00
107	107	122	989319-447	2021-03-24 00:00:00	3689.99	3689.99	0.00	3	2021-04-23 00:00:00
108	108	123	963253240	2021-03-24 00:00:00	67.00	67.00	0.00	3	2021-04-23 00:00:00
109	109	121	977222	2021-03-25 00:00:00	1000.46	1000.46	0.00	3	2021-04-24 00:00:00
110	110	80	134116	2021-03-28 00:00:00	90.36	0.00	0.00	2	2021-04-17 00:00:00
111	111	123	263253257	2021-03-30 00:00:00	22.57	22.57	0.00	3	2021-04-29 00:00:00
112	112	110	0-2436	2021-03-31 00:00:00	10976.06	0.00	0.00	3	2021-04-30 00:00:00
113	113	37	547480102	2021-04-01 00:00:00	224.00	0.00	0.00	3	2021-04-30 00:00:00
114	114	123	963253249	2021-04-02 00:00:00	127.75	127.75	0.00	3	2021-05-01 00:00:00
115	115	115	CM-004-400	2015-08-24 00:00:00	400.30	2.50	4.99	2	2015-09-01 00:00:00

Query executed successfully.

(local) (15.0 RTM) | DESKTOP-U6AC2GB\elham ... | AP | 00:00:00 | 115 rows

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NO, Because it is identity and auto incremented even if we don't enter it manually

A3:

```
SELECT * FROM VendorCopy
WHERE DefaultAccountNo = 170
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
SELECT * FROM VendorCopy
WHERE DefaultAccountNo = 170

UPDATE VendorCopy
SET DefaultAccountNo = 431
WHERE DefaultAccountNo = 170
```

The Results pane displays a table with 12 columns and 2 rows of data:

	VendorID	VendorName	VendorAddress1	VendorAddress2	VendorCity	VendorState	VendorZipCode	VendorPhone	VendorContactLName	VendorContactFName	Default TermsID	DefaultAccountNo
1	90	Wakefield Co	295 W Cromwell Ave Ste 105	NULL	Fresno	CA	93711	(559) 555-4744	Rothman	Nathanael	2	170
2	101	California Business Machines	Galery Plz	5091 N Fresno	Fresno	CA	93710	(559) 555-5570	Rohansen	Anders	2	170

The status bar at the bottom indicates "Query executed successfully." and "2 rows" were returned.

```
UPDATE VendorCopy
SET DefaultAccountNo = 431
WHERE DefaultAccountNo = 170
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
SELECT * FROM VendorCopy
WHERE DefaultAccountNo = 170

UPDATE VendorCopy
SET DefaultAccountNo = 431
WHERE DefaultAccountNo = 170
```

The Messages pane displays the following information:

(2 rows affected)
Completion time: 2021-09-29T16:26:59.9995650-04:00

The status bar at the bottom indicates "Query executed successfully." and "0 rows" were returned.

```
SELECT * FROM VendorCopy
WHERE DefaultAccountNo = 431
```

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The top pane displays a query window with the following SQL code:

```
SELECT * FROM VendorCopy
WHERE DefaultAccountNo = 431

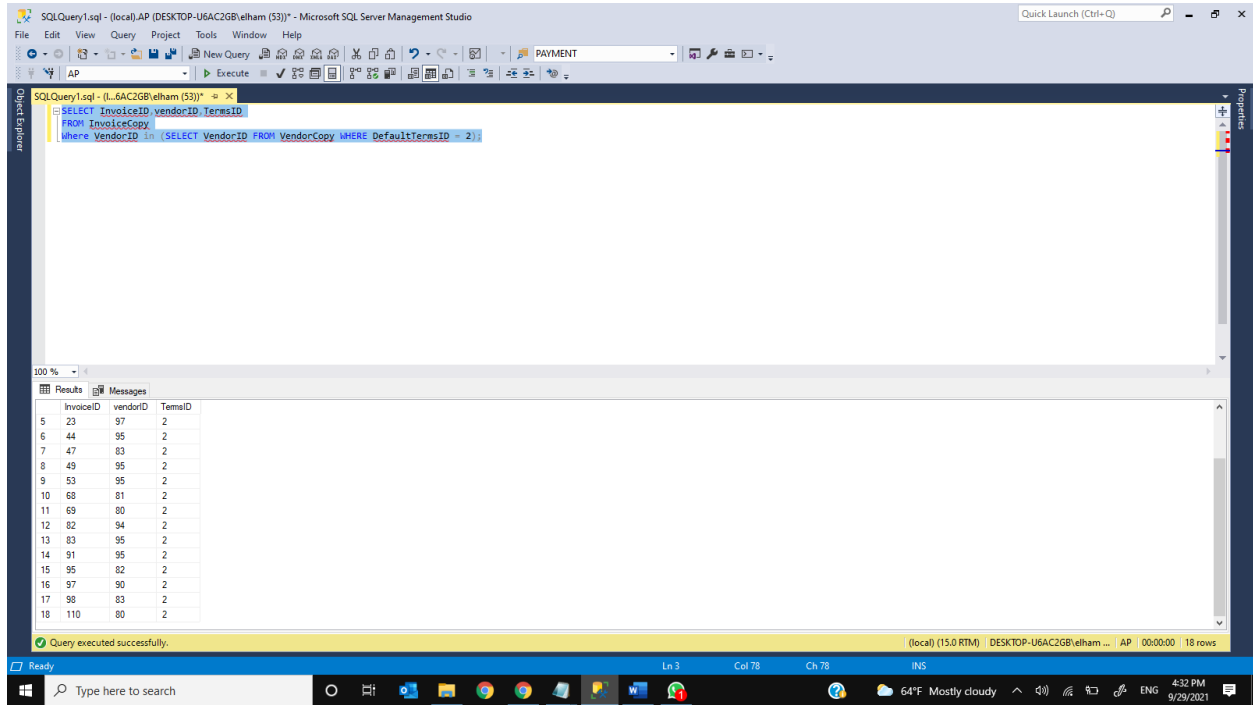
UPDATE VendorCopy
SET DefaultAccountNo = 431
WHERE DefaultAccountNo = 170
```

The bottom pane shows the results of the query execution. A status bar at the bottom indicates "Query executed successfully." and "2 rows".

VendorID	VendorName	VendorAddress1	VendorAddress2	VendorCity	VendorState	VendorZipCode	VendorPhone	VendorContactLName	VendorContactFName	DefaultTermsID	DefaultAccountNo
90	Wakefield Co	295 W Cromwell Ave Ste 105	NULL	Fresno	CA	93711	(559) 555-4744	Rothman	Nathanael	2	431
101	California Business Machines	Galaxy Plz	5091 N Fresno	Fresno	CA	93710	(559) 555-5570	Rohansen	Anders	2	431

A4:

```
SELECT InvoiceID,vendorID,TermsID
FROM InvoiceCopy
Where VendorID in (SELECT VendorID FROM VendorCopy WHERE DefaultTermsID = 2);
```



The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor at the top contains the following SQL query:

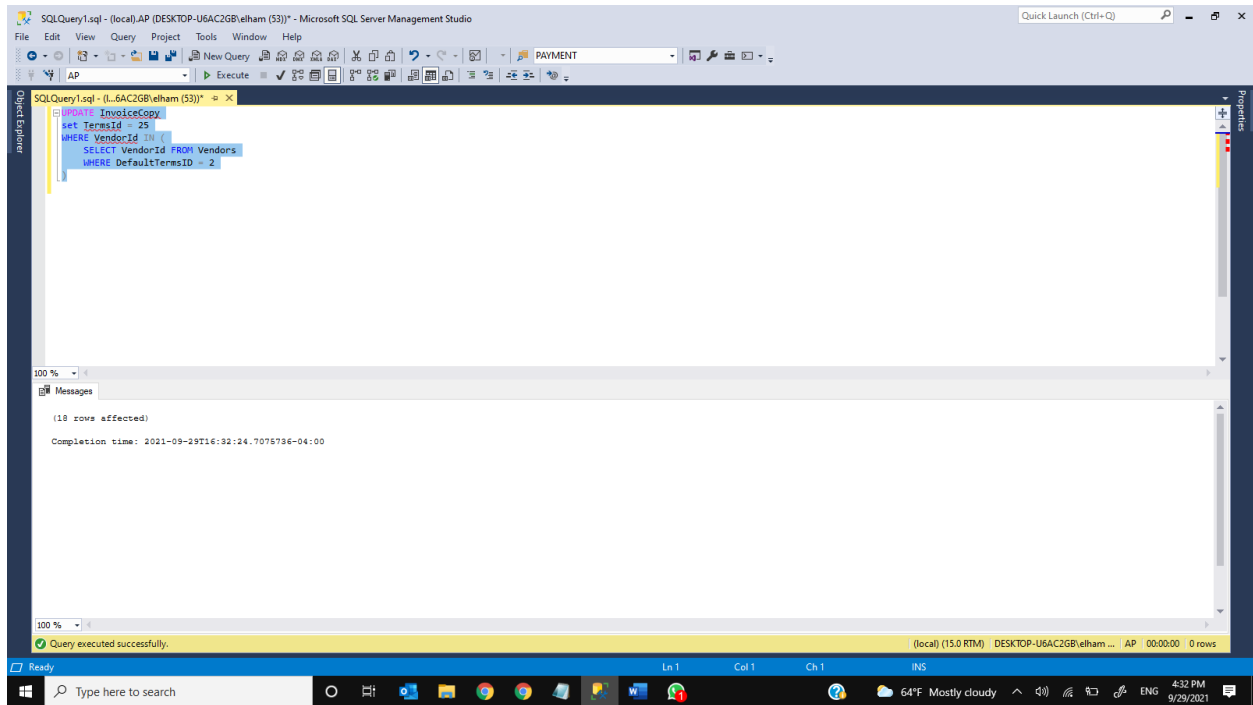
```
SELECT InvoiceID,vendorID,TermsID
FROM InvoiceCopy
Where VendorID in (SELECT VendorID FROM VendorCopy WHERE DefaultTermsID = 2);
```

The query has been executed successfully, and the results are displayed in the Results pane at the bottom. The results are as follows:

	InvoiceID	vendorID	TermsID
5	23	97	2
6	44	95	2
7	47	83	2
8	49	95	2
9	53	95	2
10	68	81	2
11	69	80	2
12	82	94	2
13	83	95	2
14	91	95	2
15	95	82	2
16	97	90	2
17	98	83	2
18	110	80	2

The status bar at the bottom indicates that the query was executed successfully and returned 18 rows.

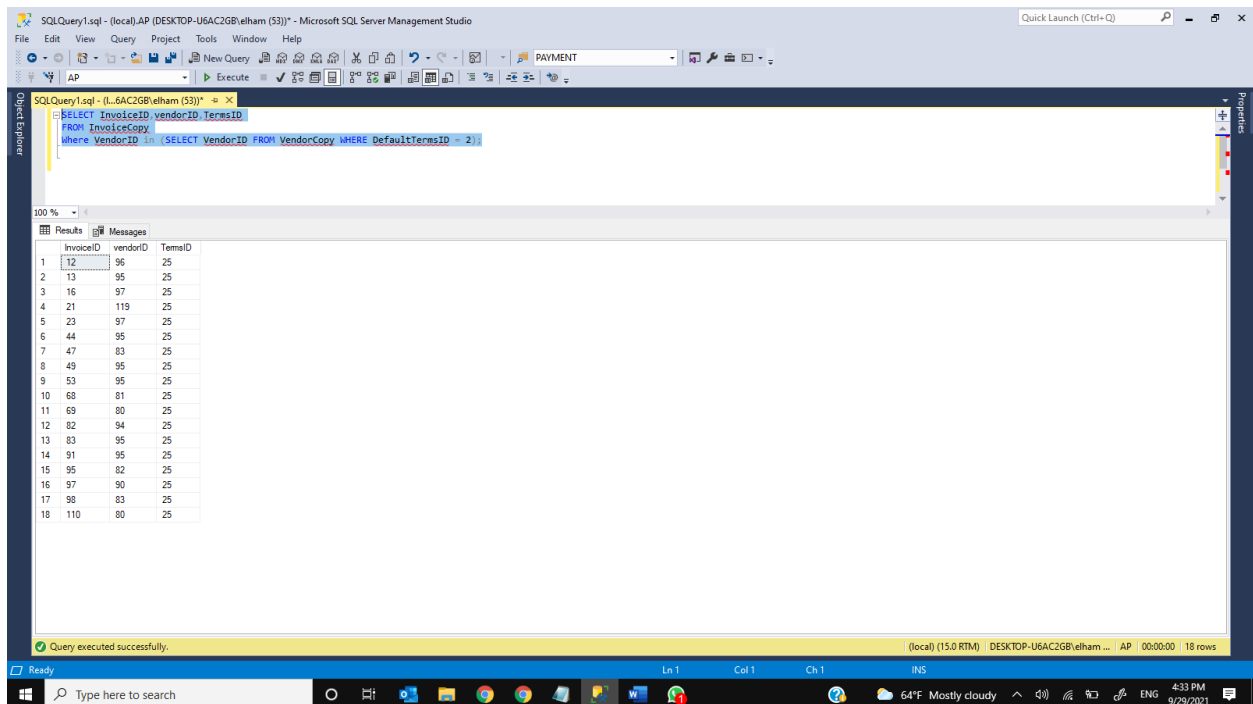
```
UPDATE InvoiceCopy
set TermsId = 25
WHERE VendorId IN (
    SELECT VendorId FROM Vendors
    WHERE DefaultTermsID = 2
)
```



```

SELECT InvoiceID,vendorID,TermsID
FROM InvoiceCopy
Where VendorID in (SELECT VendorID FROM VendorCopy WHERE DefaultTermsID = 2);

```



A5:

```
SELECT VendorID, VendorState
FROM VendorCopy
WHERE VendorState = 'NY';
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor at the top contains the following SQL code:

```
SELECT VendorID, VendorState
FROM VendorCopy
WHERE VendorState = 'NY';
```

The query has been executed successfully, and the results are displayed in the Results pane below. The results show three rows of data:

	VendorID	VendorState
1	38	NY
2	60	NY
3	61	NY

The status bar at the bottom indicates that the query was executed successfully and returned 3 rows.

```
DELETE VendorCopy
WHERE VendorState = 'NY'
```

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor at the top contains the following SQL code:

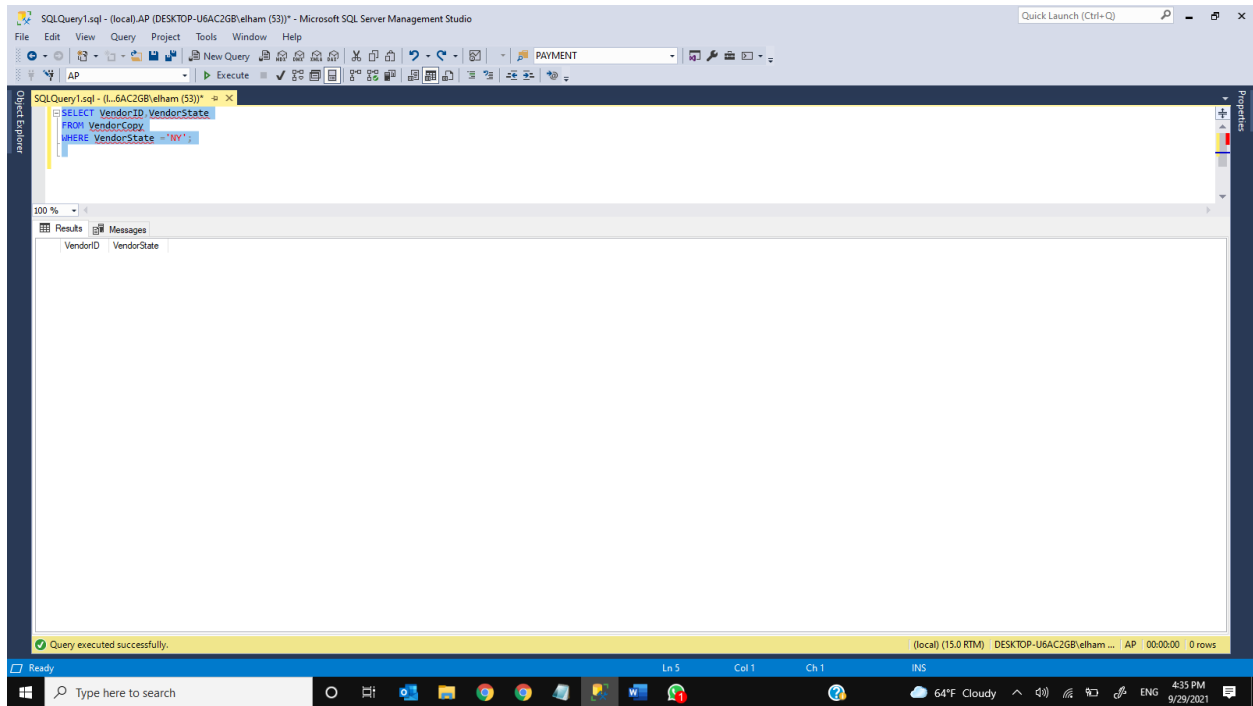
```
DELETE VendorCopy
WHERE VendorState = 'NY'
```

The query has been executed successfully, and the results are displayed in the Messages pane below. The messages indicate that 3 rows were affected and provide the completion time:

(3 rows affected)
Completion time: 2021-09-29T16:34:48.6667770-04:00

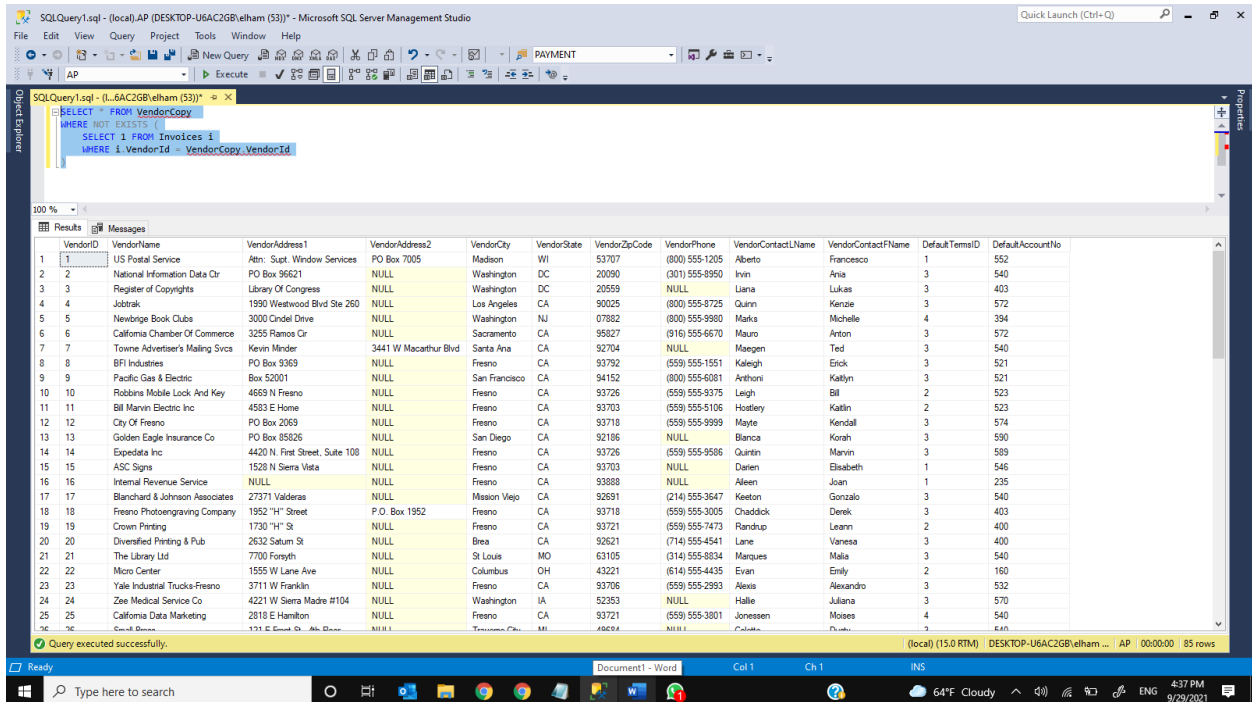
The status bar at the bottom indicates that the query was executed successfully and affected 0 rows.

```
SELECT VendorID, VendorState
FROM VendorCopy
WHERE VendorState = 'NY';
```



A6:

```
SELECT * FROM VendorCopy
WHERE NOT EXISTS (
    SELECT 1 FROM Invoices i
    WHERE i.VendorId = VendorCopy.VendorId
)
```



SQLQuery1.sql - (local)\AP (DESKTOP-U6AC2GB\elham (53)) - Microsoft SQL Server Enterprise Manager

SQLQuery1.sql - (local)\AP (DESKTOP-U6AC2GB\elham (53))

```
SELECT * FROM VendorCopy
WHERE NOT EXISTS (
    SELECT 1 FROM Invoices i
    WHERE i.VendorId = VendorCopy.VendorId
)
```

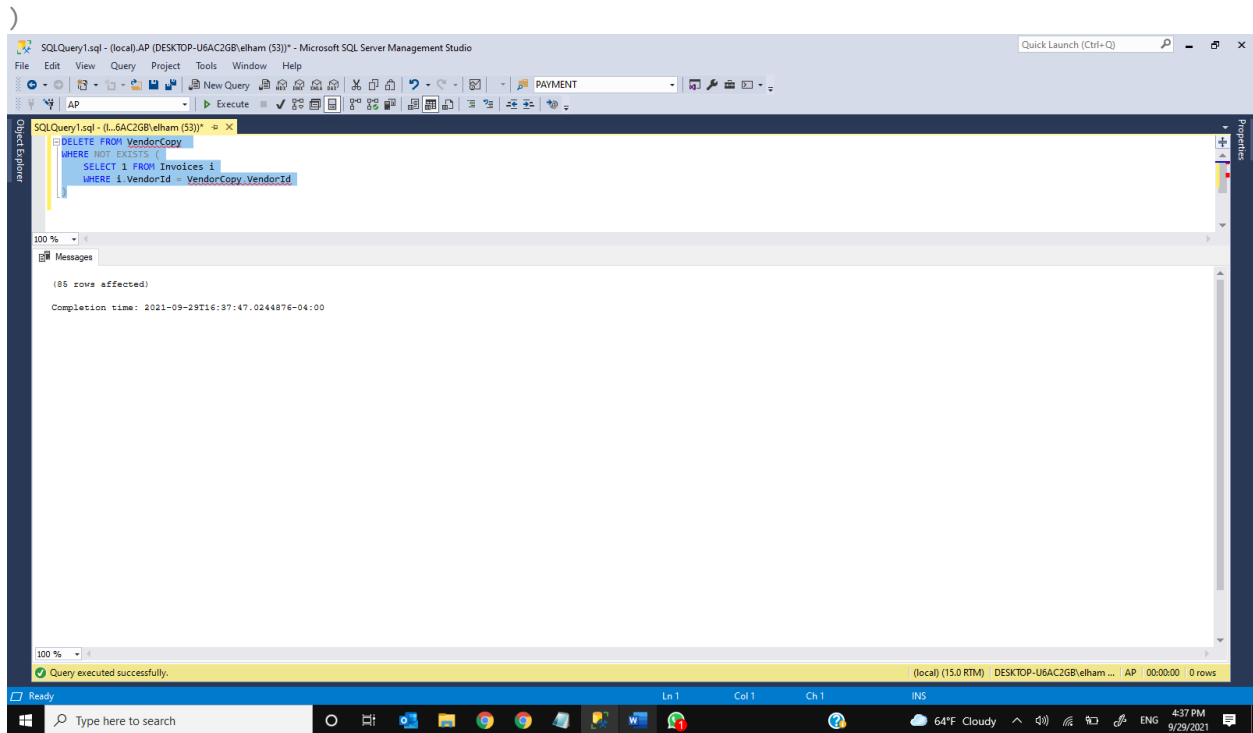
Results

	VendorID	VendorName	VendorAddress1	VendorAddress2	VendorCity	VendorState	VendorZipCode	VendorPhone	VendorContactLName	VendorContactFName	DefaultTermsID	DefaultAccountNo
1	1	US Postal Service	Attn: Supt. Window Services	PO Box 7005	Madison	WI	53707	(800) 555-1205	Alberto	Francesco	1	552
2	2	National Information Data Ctr	PO Box 96521	NULL	Washington	DC	20090	(301) 555-9950	Iviri	Aria	3	540
3	3	Register of Copyrights	Library Of Congress	NULL	Washington	DC	20559	NULL	Liana	Lukas	3	403
4	4	Jobtrak	1990 Westwood Blvd Ste 260	NULL	Los Angeles	CA	90025	(800) 555-9725	Quinn	Kenzie	3	572
5	5	Newbridge Book Clubs	3005 Crindel Drive	NULL	Washington	NI	07882	(800) 555-9980	Maksu	Michelle	4	394
6	6	California Chamber Of Commerce	3255 Ramos Cr	NULL	Sacramento	CA	95827	(916) 555-6670	Mauro	Anton	3	572
7	7	Towne Advertiser's Mailing Svcs	Kevin Minder	3441 W Macarthur Blvd	Santa Ana	CA	92704	NULL	Maegen	Ted	3	540
8	8	BFI Industries	PO Box 9369	NULL	Fresno	CA	93792	(559) 555-1551	Kaleigh	Erick	3	521
9	9	Pacific Gas & Electric	Box 52001	NULL	San Francisco	CA	94152	(800) 555-6081	Arthoni	Katlyn	3	521
10	10	Robbins Mobile Lock And Key	4669 N Fresno	NULL	Fresno	CA	93726	(559) 555-9375	Leigh	Bill	2	523
11	11	Bill Marvin Electric Inc	4583 E Home	NULL	Fresno	CA	93703	(559) 555-5106	Hostley	Katlin	2	523
12	12	City Of Fresno	PO Box 2069	NULL	Fresno	CA	93718	(559) 555-9999	Mayte	Kendall	3	574
13	13	Golden Eagle Insurance Co	PO Box 85825	NULL	San Diego	CA	92186	NULL	Blanca	Korah	3	590
14	14	Expedata Inc	4420 N. First Street, Suite 108	NULL	Fresno	CA	93726	(559) 555-9586	Quintin	Marvin	3	589
15	15	ASC Signs	1528 N Sierra Vista	NULL	Fresno	CA	93703	NULL	Danien	Elisabeth	1	546
16	16	Internal Revenue Service	NULL	NULL	Fresno	CA	93888	NULL	Aileen	Joan	1	235
17	17	Blanchard & Johnson Associates	27271 Valderas	NULL	Mission Viejo	CA	92691	(214) 555-3647	Keston	Gonzalo	3	540
18	18	Fresno Photoengraving Company	1952 "H" Street	P.O. Box 1952	Fresno	CA	93718	(559) 555-3005	Chadwick	Derek	3	403
19	19	Crown Printing	1730 "H" St	NULL	Fresno	CA	93721	(559) 555-7473	Randrup	Leann	2	400
20	20	Diversified Printing & Pub	2632 Saturn St	NULL	Brea	CA	92621	(714) 555-4541	Lane	Vanessa	3	400
21	21	The Library Ltd	7700 Forsyth	NULL	St Louis	MO	63105	(314) 555-8834	Marques	Malia	3	540
22	22	Mico Center	1555 W Lane Ave	NULL	Columbus	OH	43221	(614) 555-4435	Evan	Emily	2	160
23	23	Yale Industrial Trucks-Fresno	3711 W Franklin	NULL	Fresno	CA	93706	(559) 555-2993	Alexis	Alexandro	3	532
24	24	Zee Medical Service Co	4221 W Sierra Madre #104	NULL	Washington	IA	52353	NULL	Halle	Juliana	3	570
25	25	California Data Marketing	2818 E Hamilton	NULL	Fresno	CA	93721	(559) 555-3801	Jonesen	Moises	4	540
26	26	Small Business	131 E Grand St. 4th Floor	NULL	Tomball, TX	TX	76064	NULL	Collette	Dustin	3	640

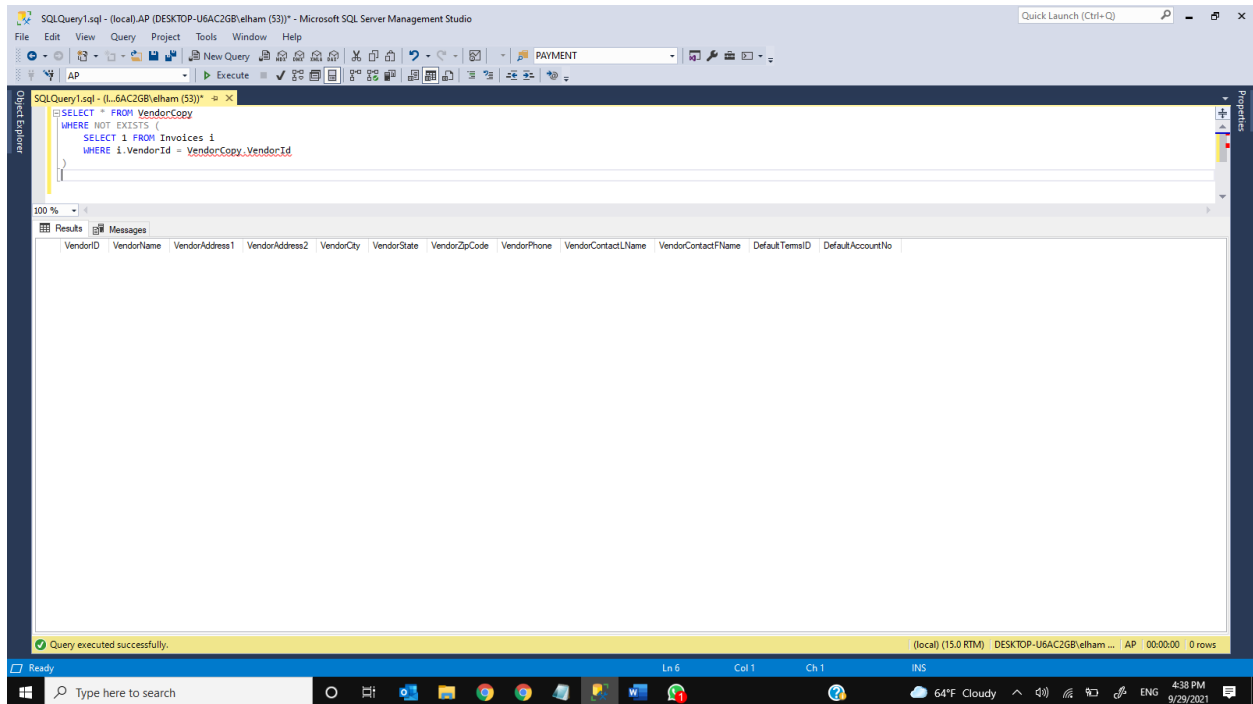
Query executed successfully.

(local) (15.0 RTM) DESKTOP-U6AC2GB\elham ... AP 00:00:00 85 rows

```
DELETE FROM VendorCopy
WHERE NOT EXISTS (
    SELECT 1 FROM Invoices i
    WHERE i.VendorId = VendorCopy.VendorId
)
```



```
SELECT * FROM VendorCopy
WHERE NOT EXISTS (
    SELECT 1 FROM Invoices i
    WHERE i.VendorId = VendorCopy.VendorId
)
```



A7:

```
SELECT CAST(PaymentTotal as DECIMAL(18,4)), CAST(PaymentTotal AS NVARCHAR(MAX)) ,  
CONVERT(DECIMAL(18,4), PaymentTotal ) ,CONVERT(NVARCHAR(MAX) , PaymentTotal , 5)  
FROM Invoicecopy
```

SQLQuery1.sql - (local)\AP [DESKTOP-U6AC2GB\elham (53)]* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

SQLQuery1.sql - (local)\AP [DESKTOP-U6AC2GB\elham (53)]* - X

```
SELECT CAST(PaymentTotal as DECIMAL(18,4)), CAST(PaymentTotal AS NVARCHAR(MAX)) ,  
CONVERT(DECIMAL(18,4), PaymentTotal ) ,CONVERT(NVARCHAR(MAX) , PaymentTotal , 5)  
FROM Invoicecopy
```

Results Messages

	(No column name)	(No column name)	(No column name)	(No column name)
1	3813.3300	3813.33	3813.3300	3.813.33
2	40.2000	40.20	40.2000	40.20
3	138.7500	138.75	138.7500	138.75
4	144.7000	144.70	144.7000	144.70
5	15.5000	15.50	15.5000	15.50
6	42.7500	42.75	42.7500	42.75
7	172.5000	172.50	172.5000	172.50
8	95.0000	95.00	95.0000	95.00
9	601.9500	601.95	601.9500	601.95
10	42.6700	42.67	42.6700	42.67
11	42.5000	42.50	42.5000	42.50
12	662.0000	662.00	662.0000	662.00
13	16.3300	16.33	16.3300	16.33
14	6.0000	6.00	6.0000	6.00
15	856.9200	856.92	856.9200	856.92
16	9.9500	9.95	9.9500	9.95
17	10.0000	10.00	10.0000	10.00
18	104.0000	104.00	104.0000	104.00
19	116.5400	116.54	116.5400	116.54
20	6.0000	6.00	6.0000	6.00
21	4901.2600	4901.26	4901.2600	4.901.26
22	108.2500	108.25	108.2500	108.25
23	9.9500	9.95	9.9500	9.95
24	1750.0000	1750.00	1750.0000	1.750.00
25	129.0000	129.00	129.0000	129.00
26	1.0.0000	1.0.00	1.0.0000	1.0.00

Query executed successfully.

(local) (15.0 RTM) | DESKTOP-U6AC2GB\elham ... AP 00:00:00 115 rows

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Ln 3 Col 17 Ch 17 INS 64°F Cloudy 4:39 PM 9/29/2021

A8:

```
SELECT CAST (PaymentDate AS NVARCHAR(MAX)), CONVERT(NVARCHAR , PaymentDate , 1),  
CONVERT(NVARCHAR , PaymentDate , 9) ,CAST(PaymentDate AS REAL)  
FROM Invoices
```

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The top pane shows the following SQL query:

```
SELECT CAST (PaymentDate AS NVARCHAR(MAX)), CONVERT(NVARCHAR , PaymentDate , 1),  
CONVERT(NVARCHAR , PaymentDate , 9) ,CAST(PaymentDate AS REAL)  
FROM Invoices
```

The bottom pane shows the results of the query, which consists of 114 rows. The columns are labeled as (No column name). The data is as follows:

	(No column name)	(No column name)	(No column name)	(No column name)
1	Jan 7 2021 12:00AM	01/07/21	Jan 7 2021 12:00:00.000AM	44201
2	Jan 14 2021 12:00AM	01/14/21	Jan 14 2021 12:00:00.000AM	44208
3	Jan 9 2021 12:00AM	01/09/21	Jan 9 2021 12:00:00.000AM	44203
4	Jan 12 2021 12:00AM	01/12/21	Jan 12 2021 12:00:00.000AM	44206
5	Jan 11 2021 12:00AM	01/11/21	Jan 11 2021 12:00:00.000AM	44205
6	Jan 21 2021 12:00AM	01/21/21	Jan 21 2021 12:00:00.000AM	44215
7	Jan 22 2021 12:00AM	01/22/21	Jan 22 2021 12:00:00.000AM	44216
8	Jan 1 2021 12:00AM	01/01/21	Jan 1 2021 12:00:00.000AM	44195
9	Jan 21 2021 12:00AM	01/21/21	Jan 21 2021 12:00:00.000AM	44215
10	Jan 22 2021 12:00AM	01/22/21	Jan 22 2021 12:00:00.000AM	44216
11	Jan 20 2021 12:00AM	01/20/21	Jan 20 2021 12:00:00.000AM	44214
12	Jan 13 2021 12:00AM	01/13/21	Jan 13 2021 12:00:00.000AM	44207
13	Jan 23 2021 12:00AM	01/23/21	Jan 23 2021 12:00:00.000AM	44217
14	Feb 10 2021 12:00AM	02/10/21	Feb 10 2021 12:00:00.000AM	44235
15	Jan 30 2021 12:00AM	01/30/21	Jan 30 2021 12:00:00.000AM	44224
16	Jan 22 2021 12:00AM	01/22/21	Jan 22 2021 12:00:00.000AM	44216
17	Feb 5 2021 12:00AM	02/05/21	Feb 5 2021 12:00:00.000AM	44230
18	Feb 5 2021 12:00AM	02/05/21	Feb 5 2021 12:00:00.000AM	44230
19	Jan 19 2021 12:00AM	01/19/21	Jan 19 2021 12:00:00.000AM	44213
20	Feb 15 2021 12:00AM	02/15/21	Feb 15 2021 12:00:00.000AM	44240
21	Jan 28 2021 12:00AM	01/28/21	Jan 28 2021 12:00:00.000AM	44223
22	Feb 9 2021 12:00AM	02/09/21	Feb 9 2021 12:00:00.000AM	44234
23	Jan 28 2021 12:00AM	01/28/21	Jan 28 2021 12:00:00.000AM	44222
24	Mar 5 2021 12:00AM	03/05/21	Mar 5 2021 12:00:00.000AM	44258
25	Feb 9 2021 12:00AM	02/09/21	Feb 9 2021 12:00:00.000AM	44234
26	Feb 13 2021 12:00AM	02/13/21	Feb 13 2021 12:00:00.000AM	44238

The status bar at the bottom indicates that the query was executed successfully and returned 114 rows.

Thank you for your time,

Syed Alireza Zarrin Mehr