DML (Advanced)

1. Find the Customers whose PostalCity='New York' (or any city of your choice) and that have the same number of CustomerTransactions and StockItemTransactions.

```
SELECT *
FROM Sales.Customers c
JOIN Sales.CustomerTransactions ct
 ON c.CustomerID = ct.CustomerID
JOIN Warehouse.StockItemTransactions it
 ON c.CustomerID = it.CustomerID
JOIN Application.Cities city
 ON c.PostalCityID = city.CityID
WHERE city.CityName = 'New York'
 AND (SELECT COUNT(*) FROM Sales.CustomerTransactions WHERE
CustomerID = c.CustomerID) =
 (SELECT COUNT(*) FROM Warehouse.StockItemTransactions WHERE
CustomerID = c.CustomerID);
```
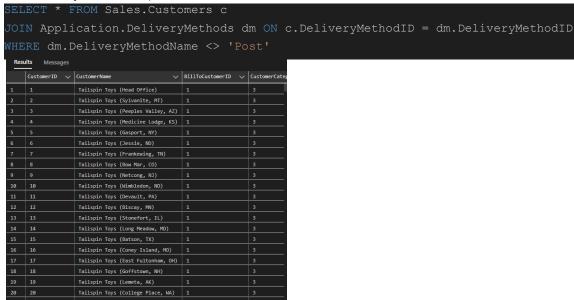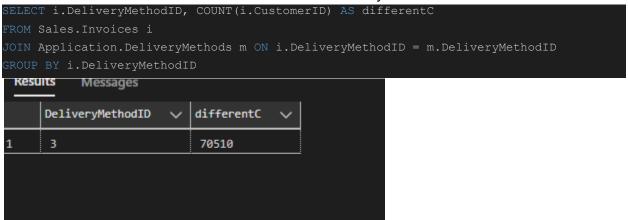
2. Find the customers that haven't had an order with DeliveryMethod=" FedEx" (or any delivery method of your choice).

```
SELECT * FROM Sales.Customers c
JOIN Application.DeliveryMethods dm ON c.DeliveryMethodID = dm.DeliveryMethodID
WHERE dm.DeliveryMethodName <> 'Post'
```

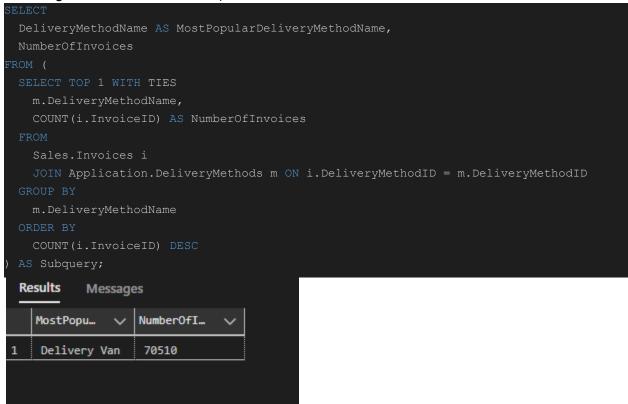|	CustomerID	CustomerName	BillToCustomerID	CustomerCateg
1	1	Tailspin Toys (Head Office)	1	3
2	2	Tailspin Toys (Sylvanite, MT)	1	3
3	3	Tailspin Toys (Peeples Valley, AZ)	1	3
4	4	Tailspin Toys (Medicine Lodge, KS)	1	3
5	5	Tailspin Toys (Gasport, NY)	1	3
6	6	Tailspin Toys (Jessie, ND)	1	3
7	7	Tailspin Toys (Frankewing, TN)	1	3
8	8	Tailspin Toys (Bow Mar, CO)	1	3
9	9	Tailspin Toys (Netcong, NJ)	1	3
10	10	Tailspin Toys (Wimbledon, ND)	1	3
11	11	Tailspin Toys (Devault, PA)	1	3
12	12	Tailspin Toys (Biscay, MN)	1	3
13	13	Tailspin Toys (Stonefort, IL)	1	3
14	14	Tailspin Toys (Long Meadow, MD)	1	3
15	15	Tailspin Toys (Batson, TX)	1	3
16	16	Tailspin Toys (Coney Island, MO)	1	3
17	17	Tailspin Toys (East Fultonham, OH)	1	3
18	18	Tailspin Toys (Goffstown, NH)	1	3
19	19	Tailspin Toys (Lemeta, AK)	1	3
20	20	Tailspin Toys (College Place, WA)	1	3
21	21	Tailspin Toys (Tresckow, PA)	1	3
22	22	Tailspin Toys (Ward Ridge, FL)	1	3

4. Update these people from the previous requirement, so that the People.IsPermitedToLogon=FALSE.

```
UPDATE WideWorldImporters.Application.People
SET IsPermittedToLogon = 'FALSE'
```

5. Find the number of different customers for each DeliveryMethod based on the Invoices table.

```sql
SELECT i.DeliveryMethodID, COUNT(i.CustomerID) AS differentC
FROM Sales.Invoices i
JOIN Application.DeliveryMethods m ON i.DeliveryMethodID = m.DeliveryMethodID
GROUP BY i.DeliveryMethodID
```

Results   Messages

	DeliveryMethodID	differentC
1	3	70510

6.Find the DeliveryMethodName of the most popular DeliveryMethod (the one which was used in the highest number of Invoices).

```sql
SELECT
  DeliveryMethodName AS MostPopularDeliveryMethodName,
  NumberOfInvoices
FROM (
  SELECT TOP 1 WITH TIES
    m.DeliveryMethodName,
    COUNT(i.InvoiceID) AS NumberOfInvoices
  FROM
    Sales.Invoices i
    JOIN Application.DeliveryMethods m ON i.DeliveryMethodID = m.DeliveryMethodID
  GROUP BY
    m.DeliveryMethodName
  ORDER BY
    COUNT(i.InvoiceID) DESC
) AS Subquery;
```

Results   Messages

	MostPopu...	NumberOfI...
1	Delivery Van	70510

7.For the CustomerCategory "Corporate Clients" (or any category of your choice), find the FullName of all SalesPersons and the number of Orders in which they received the order.

```sql
SELECT
 p.FullName AS SalesPersonFullName,
 COUNT(o.OrderID) AS NumberOfOrders
FROM
 Sales.CustomerCategories cc
JOIN
 Sales.Customers c ON cc.CustomerCategoryID = c.CustomerCategoryID
JOIN
 Application.People p ON c.PrimaryContactPersonID = p.PersonID
JOIN
 Sales.Orders o ON p.PersonID = o.SalespersonPersonID
WHERE
 cc.CustomerCategoryName = 'Agent'
GROUP BY
 p.FullName;
```

Results   Messages

SalesPersonFull...	NumberOfOrders

10. Find the CustomerCategories that have at least one customer which had less than 100 StockItemTransactions

```sql
SELECT DISTINCT cc.CustomerCategoryID, cc.CustomerCategoryName
FROM Sales.CustomerCategories cc
JOIN Sales.Customers c ON cc.CustomerCategoryID = c.CustomerCategoryID
JOIN Warehouse.StockItemTransactions sit ON c.CustomerID =
sit.CustomerID
GROUP BY cc.CustomerCategoryID, cc.CustomerCategoryName
HAVING COUNT(sit.CustomerID) < 100
```