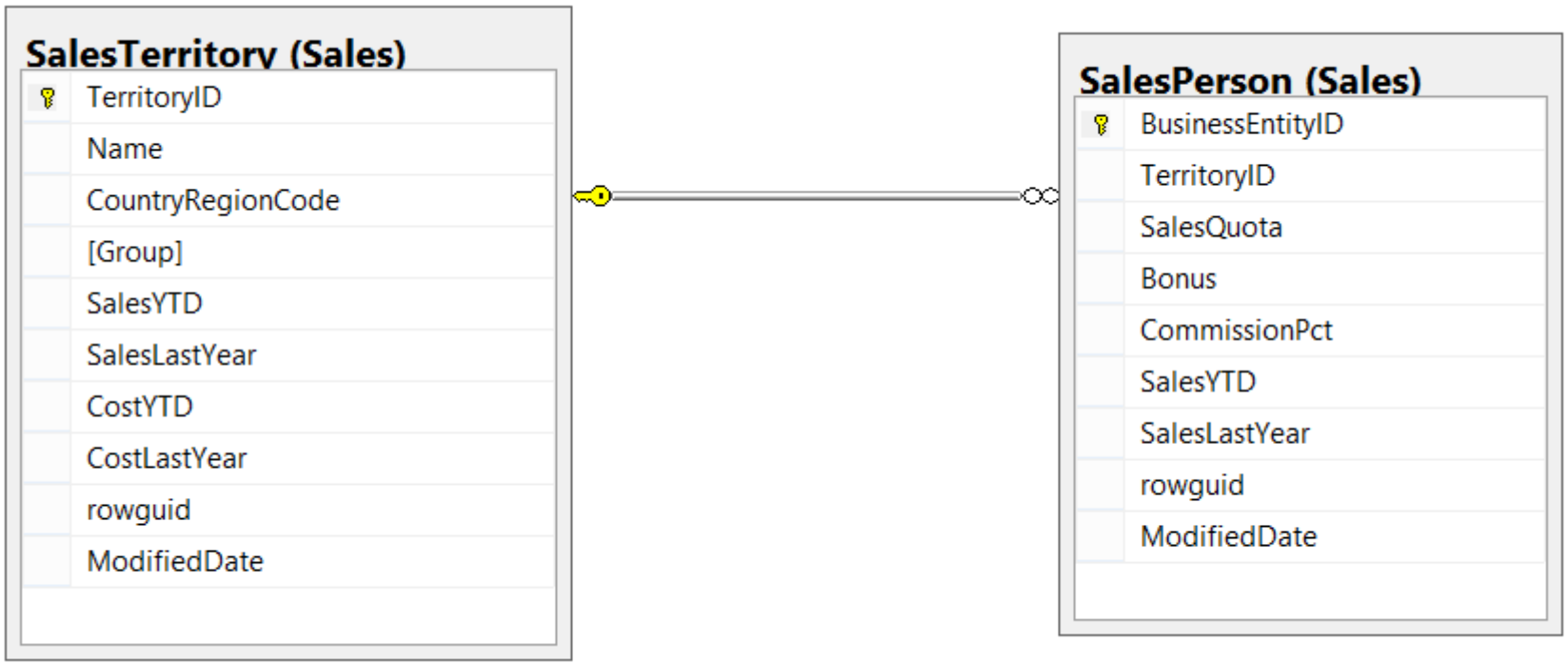
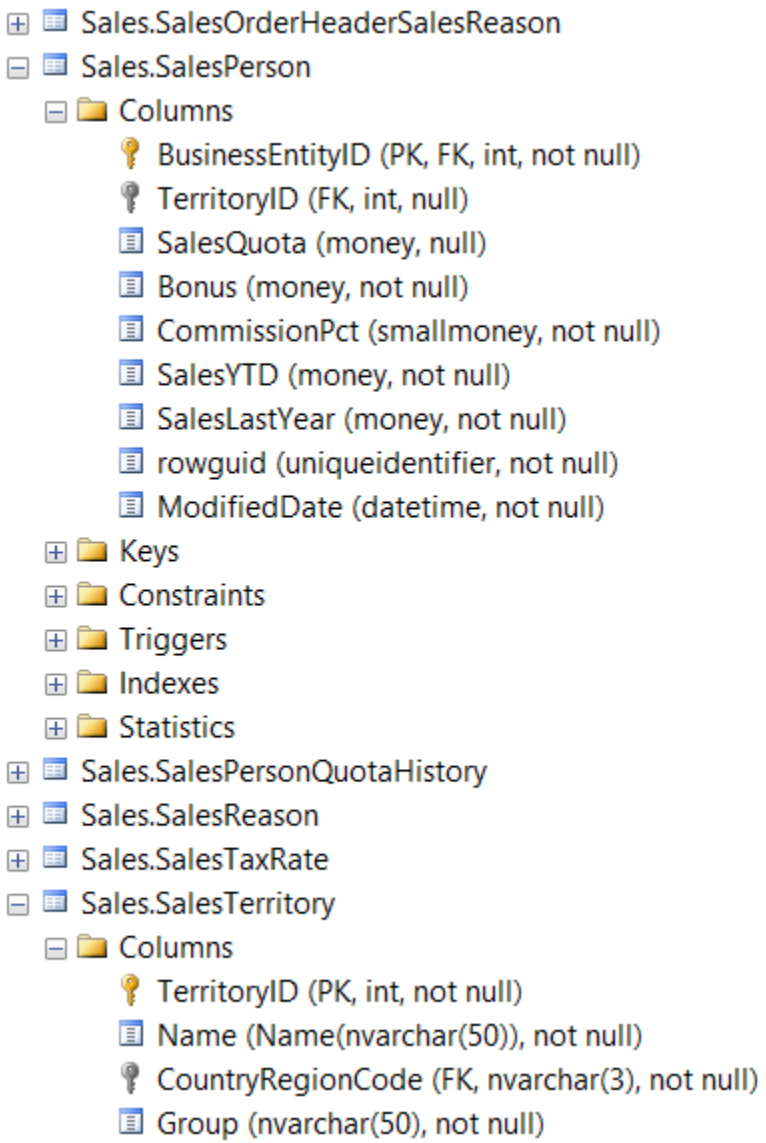
Close Look at SQL SELECT

Partial ERD


SalesTerritory (Sales)
TerritoryID
Name
CountryRegionCode
[Group]
SalesYTD
SalesLastYear
CostYTD
CostLastYear
rowguid
ModifiedDate
SalesPerson (Sales)
BusinessEntityID
TerritoryID
SalesQuota
Bonus
CommissionPct
SalesYTD
SalesLastYear
rowguid
ModifiedDate

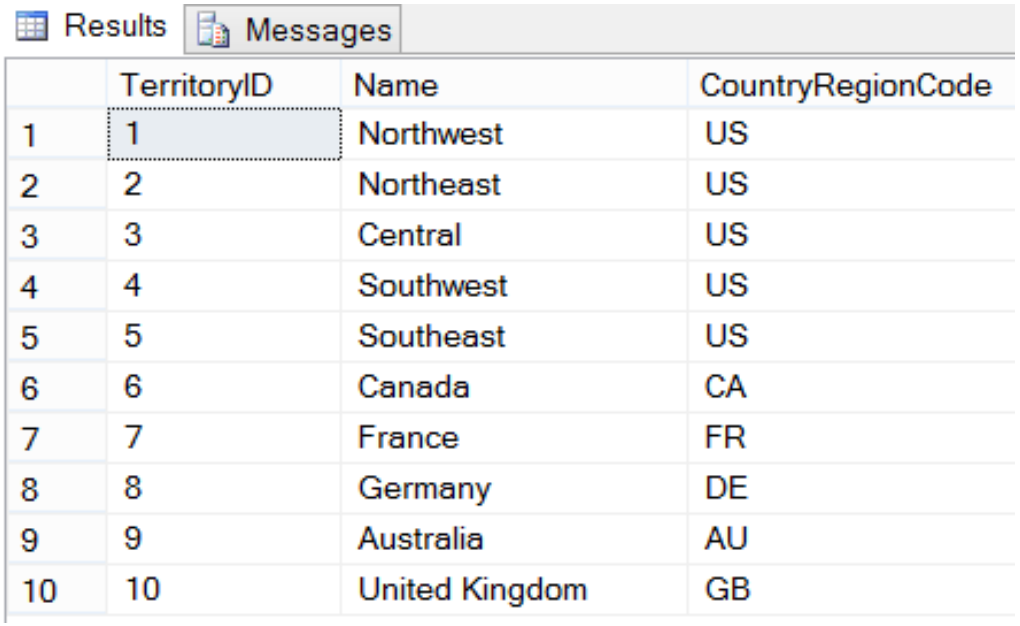
SSMS Object Explorer



Simple SELECT Statement

```
SELECT TerritoryID, Name, CountryRegionCode
FROM Sales.SalesTerritory;
```

```
SELECT TerritoryID, Name, CountryRegionCode
FROM Sales.SalesTerritory;
```


Results Messages

	TerritoryID	Name	CountryRegionCode
1	1	Northwest	US
2	2	Northeast	US
3	3	Central	US
4	4	Southwest	US
5	5	Southeast	US
6	6	Canada	CA
7	7	France	FR
8	8	Germany	DE
9	9	Australia	AU
10	10	United Kingdom	GB

Add WHERE

```
SELECT TerritoryID, Name, CountryRegionCode
FROM Sales.SalesTerritory
WHERE CountryRegionCode = 'US';
```

```sql
SELECT TerritoryID, Name, CountryRegionCode
FROM Sales.SalesTerritory
WHERE CountryRegionCode = 'US';
```

Results | Messages

	TerritoryID	Name	CountryRegionCode
1	1	Northwest	US
2	2	Northeast	US
3	3	Central	US
4	4	Southwest	US
5	5	Southeast	US

Add ORDER BY

```
SELECT TerritoryID, Name, CountryRegionCode
FROM Sales.SalesTerritory
WHERE CountryRegionCode = 'US'
ORDER BY Name;
```

```sql
SELECT TerritoryID, Name, CountryRegionCode
FROM Sales.SalesTerritory
WHERE CountryRegionCode = 'US'
ORDER BY Name;
```

Results | Messages

	TerritoryID	Name	CountryRegionCode
1	3	Central	US
2	2	Northeast	US
3	1	Northwest	US
4	5	Southeast	US
5	4	Southwest	US

INNER JOIN

```
SELECT T.TerritoryID, T.Name ,
       S.BusinessEntityID AS [Sales Person ID]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID;
```

```sql
SELECT T.TerritoryID, T.Name ,
       S.BusinessEntityID AS [Sales Person ID]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID;
```

Results | Messages

	TerritoryID	Name	Sales Person ID
1	2	Northeast	275
2	4	Southwest	276
3	3	Central	277
4	6	Canada	278
5	5	Southeast	279
6	1	Northwest	280
7	4	Southwest	281
8	6	Canada	282
9	1	Northwest	283
10	1	Northwest	284

Use AGGREGATE Function

```
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
GROUP BY T.TerritoryID, T.Name;
```

```sql
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
GROUP BY T.TerritoryID, T.Name;
```

Results | Messages

	TerritoryID	Name	Total Sales People
1	9	Australia	1
2	6	Canada	2
3	3	Central	1
4	7	France	1
5	8	Germany	1
6	2	Northeast	1
7	1	Northwest	3
8	5	Southeast	1
9	4	Southwest	2
10	10	United Kingdom	1

Add HAVING

```
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
GROUP BY T.TerritoryID, T.Name
HAVING Count(S.BusinessEntityID) > 1;
```

```sql
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
GROUP BY T.TerritoryID, T.Name
HAVING Count(S.BusinessEntityID) > 1;
```

Results | Messages

	TerritoryID	Name	Total Sales People
1	6	Canada	2
2	1	Northwest	3
3	4	Southwest	2

Add WHERE

```
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
WHERE T.CountryRegionCode = 'US'
GROUP BY T.TerritoryID, T.Name
HAVING Count(S.BusinessEntityID) > 1;
```

```sql
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
WHERE T.CountryRegionCode = 'US'
GROUP BY T.TerritoryID, T.Name
HAVING Count(S.BusinessEntityID) > 1;
```

Results | Messages

	TerritoryID	Name	Total Sales People
1	1	Northwest	3
2	4	Southwest	2

Add ORDER BY

```
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales
People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
WHERE T.CountryRegionCode = 'US'
GROUP BY T.TerritoryID, T.Name
HAVING Count(S.BusinessEntityID) > 1
ORDER BY Count(S.BusinessEntityID);
```

```sql
SELECT T.TerritoryID, T.Name ,
       Count(S.BusinessEntityID) AS [Total Sales
People]
FROM Sales.SalesTerritory T
INNER JOIN Sales.SalesPerson S
ON T.TerritoryID = S.TerritoryID
WHERE T.CountryRegionCode = 'US'
GROUP BY T.TerritoryID, T.Name
HAVING Count(S.BusinessEntityID) > 1
ORDER BY Count(S.BusinessEntityID);
```

Results | Messages

	TerritoryID	Name	Total Sales People
1	4	Southwest	2
2	1	Northwest	3