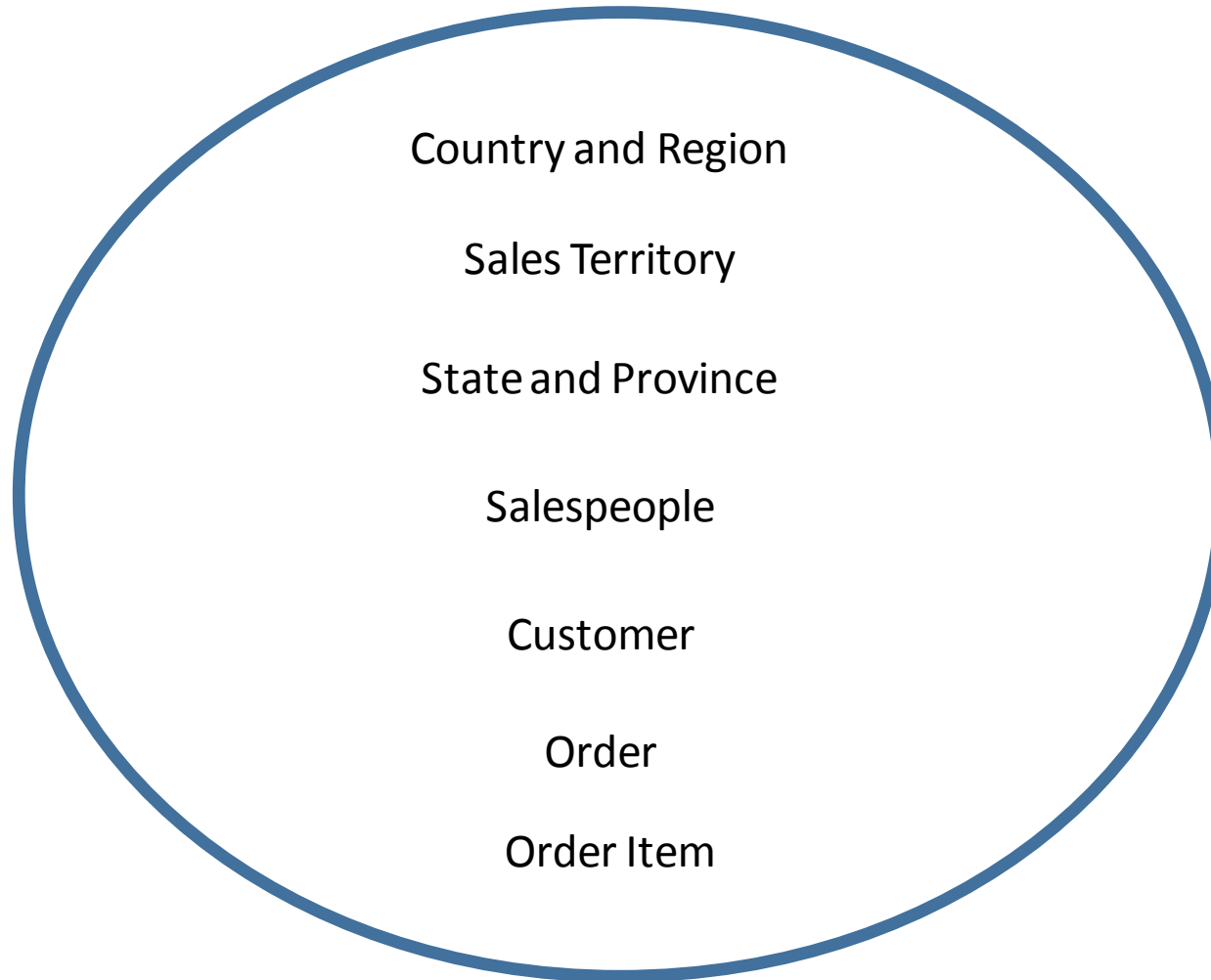


Data Hierarchy and SQL JOINS Review

Data Hierarchy of Orders in AdventureWorks

All Customer Orders



States in Territory 1

```
SELECT Name  
FROM Person.StateProvince  
WHERE TerritoryID = 1  
ORDER BY Name;
```

Name
Alaska
American Samoa
Hawaii
Idaho
Montana
Nevada
Oregon
Utah
Washington
Wyoming

Get Order Count for each State in Territory 1

```
SELECT c.Name, COUNT(DISTINCT SalesOrderID)
TotalOrderCount
FROM Sales.SalesOrderHeader a
INNER JOIN Sales.SalesTerritory b
    ON a.TerritoryID = b.TerritoryID
INNER JOIN Person.StateProvince c
    ON b.TerritoryID = c.TerritoryID
WHERE c.Name IN (SELECT Name FROM
Person.StateProvince WHERE TerritoryID = 1)
GROUP BY c.Name
ORDER BY c.Name;
```

Name	TotalOrderCount
Alaska	4594
American Samoa	4594
Hawaii	4594
Idaho	4594
Montana	4594
Nevada	4594
Oregon	4594
Utah	4594
Washington	4594
Wyoming	4594

The returned data was obviously wrong. What's wrong with the code?

Calculate Total Sales for each territory

-- Solution

```
SELECT oh.TerritoryID, st.Name,  
ROUND(SUM(oh.TotalDue), 2) TotalSales  
FROM Sales.SalesOrderDetail od  
INNER JOIN Sales.SalesOrderHeader oh  
ON oh.SalesOrderID = od.SalesOrderID  
INNER JOIN Sales.SalesTerritory st  
ON st.TerritoryID = oh.TerritoryID  
GROUP BY oh.TerritoryID, st.Name  
ORDER BY oh.TerritoryID DESC;
```

TerritoryID	Name	TotalSales
10	United Kingdom	187208421.64
9	Australia	70573924.16
8	Germany	92658225.65
7	France	198158287.87
6	Canada	526969463.24
5	Southeast	226427460.25
4	Southwest	696896625.81
3	Central	263099145.85
2	Northeast	253771294.44
1	Northwest	411207275.13

Is this solution correct? If no, why not?