

GROUP BY Clause Practice Problems

- 1) In the Person.Person table, how many people are associated with each PersonType?
- 2) Using only one query, find out how many products in Production.Product are the color "red" and how many are "black".
- 3) Using Sales.SalesOrderHeader, how many sales occurred in each territory between July 1, 2005 and December 31, 2006? Order the results by the sale count in descending order.
- 4) Expanding on the previous example, group the results not by the TerritoryID but by the name of the territory (found in the Sales.SalesTerritory table).
- 5) Using the Book, BookAuthor, Author and/or Publisher tables, identify how many books each author either wrote or co-authored.

GROUP BY Clause Practice Problem Solutions

Question 1:

```
SELECT
    PersonType,
    COUNT(*) AS PersonCount
FROM Person.Person
GROUP BY PersonType
```

Question 2:

```
SELECT
    Color,
    COUNT(*) AS ProductCount
FROM Production.Product
WHERE Color IN ('Red', 'Black')
GROUP BY Color
```

Question 3:

```
SELECT
    TerritoryID,
    COUNT(*) AS SalesCount
FROM Sales.SalesOrderHeader
WHERE OrderDate BETWEEN '7/1/2005' AND '12/31/2006'
GROUP BY TerritoryID
```

Question 4:

```
SELECT
    ST.Name AS TerritoryName,
    COUNT(*) AS SalesCount
FROM Sales.SalesOrderHeader SOH
LEFT OUTER JOIN Sales.SalesTerritory ST
ON ST.TerritoryID = SOH.TerritoryID
WHERE OrderDate BETWEEN '7/1/2005' AND '12/31/2006'
GROUP BY ST.Name
```

Question 5:

```
SELECT
    A.AuthorName,
    COUNT(*) AS BookCount
FROM BookAuthor BA
INNER JOIN Author A
ON A.AuthorID = BA.AuthorID
GROUP BY A.AuthorName
```