

SALES TABLE

```
CREATE TABLE Sales (  
SaleID INT PRIMARY KEY,  
Salesperson VARCHAR(50),  
Region VARCHAR(50),  
Product VARCHAR(50),  
Quantity INT,  
SaleAmount DECIMAL(10,2)  
);  
  
INSERT INTO Sales VALUES (1, 'Alice', 'North', 'Laptop', 1, 1000.00);  
INSERT INTO Sales VALUES (2, 'Bob', 'South', 'Mouse', 3, 75.00);  
INSERT INTO Sales VALUES (3, 'Alice', 'North', 'Monitor', 2, 300.00);  
INSERT INTO Sales VALUES (4, 'Charlie', 'East', 'Keyboard', 1, 50.00);  
INSERT INTO Sales VALUES (5, 'Bob', 'South', 'Monitor', 1, 150.00);  
INSERT INTO Sales VALUES (6, 'Alice', 'North', 'Mouse', 2, 50.00);  
INSERT INTO Sales VALUES (7, 'Charlie', 'East', 'Laptop', 2, 2000.00);  
INSERT INTO Sales VALUES (8, 'David', 'West', 'Laptop', 1, 1100.00);  
INSERT INTO Sales VALUES (9, 'David', 'West', 'Mouse', 4, 100.00);  
INSERT INTO Sales VALUES (10, 'Eve', 'South', 'Monitor', 3, 450.00);  
INSERT INTO Sales VALUES (11, 'Eve', 'South', 'Keyboard', 2, 100.00);  
INSERT INTO Sales VALUES (12, 'Eve', 'South', 'Mouse', 1, 25.00);  
INSERT INTO Sales VALUES (13, 'Alice', 'North', 'Keyboard', 1, 60.00);  
INSERT INTO Sales VALUES (14, 'Bob', 'South', 'Laptop', 1, 1200.00);  
INSERT INTO Sales VALUES (15, 'Charlie', 'East', 'Mouse', 2, 50.00);
```

1.Find total quantity sold by each salesperson.

```
QUERIES: SELECT Salesperson, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY  
Salesperson;
```

	Salesperson	TotalQuantity
▶	Alice	6
	Bob	5
	Charlie	5
	David	5
	Eve	6

2.Find salespersons who sold more than 5 items in total.

QUERIES: SELECT Salesperson, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY Salesperson HAVING SUM(Quantity) > 5;

	Salesperson	TotalQuantity
▶	Alice	6
	Eve	6

3.Find number of products sold by each salesperson.

QUERIES: SELECT Salesperson, COUNT(*) AS NumberOfSales FROM Sales GROUP BY Salesperson;

	Salesperson	NumberOfSales
▶	Alice	4
	Bob	3
	Charlie	3
	David	2
	Eve	3

4.List regions where total sale amount exceeded \$1000.

QUERIES: SELECT Region, SUM(SaleAmount) AS TotalSales FROM Sales GROUP BY Region HAVING SUM(SaleAmount) > 1000;

	Region	TotalSales
▶	North	1410.00
	South	2000.00
	East	2100.00
	West	1200.00

5.Show salespersons who made more than 2 sales transactions.

QUERIES: SELECT Salesperson, COUNT(*) AS Transactions FROM Sales GROUP BY Salesperson HAVING COUNT(*) > 2;

	Salesperson	Transactions
▶	Alice	4
	Bob	3
	Charlie	3
	Eve	3

6.Find total sale amount by product, and show only products that made over \$500 in sales.

QUERIES: SELECT Product, SUM(SaleAmount) AS TotalSales FROM Sales GROUP BY Product HAVING SUM(SaleAmount) > 500;

	Product	TotalSales
▶	Laptop	5300.00
	Monitor	900.00

7.Show the total quantity sold of each product in each region.

QUERIES: SELECT Region, Product, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY Region, Product;

	Region	Product	TotalQuantity
▶	North	Laptop	1
	South	Mouse	4
	North	Monitor	2
	East	Keyboard	1
	South	Monitor	4
	North	Mouse	2
	East	Laptop	2
	West	Laptop	1
	West	Mouse	4
	South	Keyboard	2
	North	Keyboard	1
	South	Laptop	1
	East	Mouse	2

8.Find salespersons who sold more than 1 type of product.

QUERIES: SELECT Salesperson FROM Sales GROUP BY Salesperson HAVING COUNT(DISTINCT Product) > 1;

	Salesperson
▶	Alice
	Bob
	Charlie
	David
	Eve

9.Find the average quantity per product sold per region, where the average is greater than 1.

QUERIES: SELECT Region, Product, AVG(Quantity) AS AvgQuantity FROM Sales GROUP BY Region, Product HAVING AVG(Quantity) > 1;

	Region	Product	AvgQuantity
▶	South	Mouse	2.0000
	North	Monitor	2.0000
	South	Monitor	2.0000
	North	Mouse	2.0000
	East	Laptop	2.0000
	West	Mouse	4.0000
	South	Keyboard	2.0000
	East	Mouse	2.0000

10.Show salespersons whose total sale amount is between \$500 and \$1500.

QUERIES: SELECT Salesperson, SUM(SaleAmount) AS TotalSales FROM Sales GROUP BY Salesperson HAVING SUM(SaleAmount) BETWEEN 500 AND 1500;

	Salesperson	TotalSales
▶	Alice	1410.00
	Bob	1425.00
	David	1200.00
	Eve	575.00

11.List top-performing products (more than 3 units sold in total).

QUERIES: SELECT Product, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY Product HAVING SUM(Quantity) > 3;

	Product	TotalQuantity
▶	Laptop	5
	Mouse	12
	Monitor	6
	Keyboard	4

12. List salespersons who sold laptops.

QUERIES: SELECT DISTINCT Salesperson FROM Sales WHERE Product = 'Laptop';

	Salesperson
▶	Alice
	Charlie
	David
	Bob

13. Find total sale amount per salesperson per region, only where it exceeds \$500.

QUERIES: SELECT Salesperson, Region, SUM(SaleAmount) AS TotalSales FROM Sales GROUP BY Salesperson, Region HAVING SUM(SaleAmount) > 500;

	Salesperson	Region	TotalSales
▶	Alice	North	1410.00
	Bob	South	1425.00
	Charlie	East	2100.00
	David	West	1200.00
	Eve	South	575.00

14. Find salespersons who sold at least 2 different products in a single region.

QUERIES: SELECT Salesperson, Region FROM Sales GROUP BY Salesperson, Region HAVING COUNT(DISTINCT Product) >= 2;

	Salesperson	Region
▶	Alice	North
	Bob	South
	Charlie	East
	David	West
	Eve	South

15. Find products that were sold in more than one region.

QUERIES: SELECT Product FROM Sales GROUP BY Product HAVING COUNT(DISTINCT Region) > 1;

	Product
▶	Keyboard
	Laptop
	Monitor
	Mouse

16.Show total number of sales per product and hide products with fewer than 2 sales.

QUERIES: SELECT Product, COUNT(*) AS NumSales FROM Sales GROUP BY Product HAVING COUNT(*) >= 2;

	Product	NumSales
▶	Laptop	4
	Mouse	5
	Monitor	3
	Keyboard	3

17.Find region-wise total quantity sold by each salesperson.

QUERIES: SELECT Region, Salesperson, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY Region, Salesperson;

	Region	Salesperson	TotalQuantity
▶	North	Alice	6
	South	Bob	5
	East	Charlie	5
	West	David	5
	South	Eve	6

18.Find salespersons who made more than 3 transactions and total sales amount is over \$1000.

QUERIES: SELECT Salesperson, COUNT(*) AS Transactions, SUM(SaleAmount) AS TotalSales FROM Sales GROUP BY Salesperson HAVING COUNT(*) > 3 AND SUM(SaleAmount) > 1000;

	Salesperson	Transactions	TotalSales
▶	Alice	4	1410.00

19.Find average sale amount per region and show only regions with average above \$200.

QUERIES: SELECT Region, AVG(SaleAmount) AS AvgSaleAmount FROM Sales GROUP BY Region
HAVING AVG(SaleAmount) > 200;

	Region	AvgSaleAmount
▶	North	352.500000
	South	333.333333
	East	700.000000
	West	600.000000

20.List regions and products where more than 3 units were sold.

QUERIES: SELECT Region, Product, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY
Region, Product HAVING SUM(Quantity) > 3;

	Region	Product	TotalQuantity
▶	South	Mouse	4
	South	Monitor	4
	West	Mouse	4