Sales Table

Step 1: Create the Example Table

```
CREATE TABLE Sales (
    SaleID INT PRIMARY KEY,
    Salesperson VARCHAR(50),
    Region VARCHAR(50),
    Product VARCHAR(50),
    Quantity INT,
    SaleAmount DECIMAL(10,2)
);
```

Step 2: Insert Sample Data

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

1.Find total quantity sold by each salesperson.

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

3.**Find number of products sold by each salesperson.**

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

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

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

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

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

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

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

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

12.List salespersons who sold laptops.

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

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

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

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

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

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

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

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

```
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',4,1000.00);
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','Moused',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);
SELECT * FROM Sales;
SELECT Salesperson, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY Salesperson;
SELECT Salesperson, SUM(Quantity) AS TotalQuantity FROM Sales GROUP BY Salesperson
HAVING SUM(Quantity) > 5;
SELECT Salesperson, COUNT(DISTINCT Product) AS ProductCount FROM Sales GROUP BY
Salesperson;
SELECT Region, SUM(SaleAmount) AS TotalSales FROM Sales GROUP BY Region HAVING
SUM(SaleAmount) > 1000;
SELECT Salesperson, COUNT(*) AS Transactions FROM Sales GROUP BY Salesperson HAVING
COUNT(*) > 2;
```

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

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

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

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

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

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

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

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

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

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

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

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

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

SELECT Region, AVG(SaleAmount) AS AvgSale FROM Sales GROUP BY Region HAVING AVG(SaleAmount) > 20;

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

SaleID	Salesperson	Region	Product	Quantity	SaleAmount
1	Alice	North	Laptop	1	1000.00
2	Bob	South	Mouse	3	75.00
3	Alice	North	Monitor	2	300.00
4	Charlie	East	Keyboard	1	50.00
5	Bob	South	Monitor	1	150.00
6	Alice	North	Mouse	2	50.00
7	Charlie	East	Laptop	2	2000.00
8	David	West	Laptop	1	1100.00
9	David	West	Mouse	4	1000.00
10	Eve	South	Monitor	3	450.00
11	Eve	South	Keyboard	2	100.00
12	Eve	South	Moused	1	25.00
13	Alice	North	Keyboard	1	60.00
14	Bob	South	Laptop	1	1200.00
15	Charlie	East	Mouse	2	50.00

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

```
+-------------+---------------+

+-------------+---------------+

| Salesperson | TotalQuantity |

+-------------+---------------+

| Alice       |             6 |

| Eve         |             6 |

+-------------+---------------+

+-------------+--------------+

| Salesperson | ProductCount |

+-------------+--------------+

| Alice       |           4 |

| Bob         |           3 |

| Charlie     |           3 |

| David       |           2 |

| Eve         |           3 |

+-------------+--------------+

+--------+------------+

| Region | TotalSales |

+--------+------------+

| North  |    1410.00 |

| South  |    2000.00 |

| East   |    2100.00 |

| West   |    2100.00 |

+--------+------------+

+-------------+--------------+

| Salesperson | Transactions |

+-------------+--------------+

| Alice       |           4 |
```

| Bob | 3 |

| Charlie | 3 |

| Eve | 3 |

+-------------+--------------+

+---------+------------+

| Product | TotalSales |

+---------+------------+

| Laptop | 5300.00 |

| Mouse | 1175.00 |

| Monitor | 900.00 |

+---------+------------+

+--------+----------+---------------+

| Region | Product | TotalQuantity |

+--------+----------+---------------+

| North | Laptop | 1 |

| South | Mouse | 3 |

| North | Monitor | 2 |

| East | Keyboard | 1 |

| South | Monitor | 4 |

| North | Mouse | 2 |

| East | Laptop | 2 |

| West | Laptop | 1 |

| West | Mouse | 4 |

| South | Keyboard | 2 |

| South | Moused | 1 |

| North | Keyboard | 1 |

| South | Laptop | 1 |

| East | Mouse | 2 |

+--------+----------+---------------+

+-------------+

| Salesperson |

+-------------+

| Alice |

| Bob |

| Charlie |

| David |

| Eve |

+-------------+

+--------+----------+-------------+

| Region | Product | AvgQuantity |

+--------+----------+-------------+

| South | Mouse | 3.0000 |

| 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 |

+--------+----------+-------------+

+-------------+------------+

| Salesperson | TotalSales |

+-------------+------------+

| Alice | 1410.00 |

| Bob | 1425.00 |

| Eve | 575.00 |

```
+-------------+------------+
+----------+---------------+
| Product  | TotalQuantity |
+----------+---------------+
| Laptop   |           5 |
| Mouse    |          11 |
| Monitor  |           6 |
| Keyboard |           4 |
+----------+---------------+
+-------------+
| Salesperson |
+-------------+
| Alice       |
| Charlie     |
| David       |
| Bob         |
+-------------+
+-------------+--------+------------+
| Salesperson | Region | TotalSales |
+-------------+--------+------------+
| Alice       | North  |    1410.00 |
| Bob         | South  |    1425.00 |
| Charlie     | East   |    2100.00 |
| David       | West   |    2100.00 |
| Eve         | South  |     575.00 |
+-------------+--------+------------+
+-------------+--------+
| Salesperson | Region |
```

```
+-------------+--------+
| Alice       | North  |
| Bob         | South  |
| Charlie     | East   |
| David       | West   |
| Eve         | South  |
+-------------+--------+
```

```
+----------+
| Product  |
+----------+
| Keyboard |
| Laptop   |
| Monitor  |
| Mouse    |
+----------+
```

```
+----------+------------+
| Product  | SalesCount |
+----------+------------+
| Laptop   |          4 |
| Mouse    |          4 |
| Monitor  |          3 |
| Keyboard |          3 |
+----------+------------+
```

```
+-------------+--------+---------------+
| Salesperson | Region | TotalQuantity |
+-------------+--------+---------------+
| Alice       | North  |             6 |
| Bob         | South  |             5 |
```

| Charlie | East | 5 |

| David | West | 5 |

| Eve | South | 6 |

+-------------+--------+---------------+

+-------------+--------------+------------+

| Salesperson | Transactions | TotalSales |

+-------------+--------------+------------+

| Alice | 4 | 1410.00 |

+-------------+--------------+------------+

+--------+-------------+

| Region | AvgSale |

+--------+-------------+

| North | 352.500000 |

| South | 333.333333 |

| East | 700.000000 |

| West | 1050.000000 |

+--------+-------------+

+--------+---------+---------------+

| Region | Product | TotalQuantity |

+--------+---------+---------------+

| South | Monitor | 4 |

| West | Mouse | 4 |

+--------+---------+---------------+