

## RANKING AND WINDOW FUNCTION

```
CREATE DATABASE PracticeDB;
USE PracticeDB;
CREATE TABLE Products (
    ProductID INT,
    ProductName VARCHAR(100),
    Category VARCHAR(50),
    Price DECIMAL(10,2)
);
```

```
INSERT INTO Products (ProductID, ProductName, Category, Price)
VALUES
(1, 'Laptop', 'Electronics', 80000),
(2, 'Mobile', 'Electronics', 50000),
(3, 'Camera', 'Electronics', 50000),
(4, 'Jeans', 'Clothing', 2000),
(5, 'T-Shirt', 'Clothing', 1000),
(6, 'Jacket', 'Clothing', 2000),
(7, 'Apple', 'Groceries', 100),
(8, 'Banana', 'Groceries', 40),
(9, 'Mango', 'Groceries', 100);
```

```
SELECT * FROM Products;
SELECT
    ProductID,
    ProductName,
    Category,
    Price,
    ROW_NUMBER() OVER (PARTITION BY Category ORDER BY Price DESC) AS
RowNum,
    RANK() OVER (PARTITION BY Category ORDER BY Price DESC) AS RankNum,
    DENSE_RANK() OVER (PARTITION BY Category ORDER BY Price DESC) AS
DenseRankNum
FROM Products;
```

```
WITH RankedProducts AS (
    SELECT *,
        ROW_NUMBER() OVER (PARTITION BY Category ORDER BY Price DESC) AS
RowNum
    FROM Products
)
SELECT *
FROM RankedProducts
WHERE RowNum <= 3;
```

100 % 1 0

Results Messages

	ProductID	ProductName	Category	Price
1	1	Laptop	Electronics	80000.00
2	2	Mobile	Electronics	50000.00
3	3	Camera	Electronics	50000.00
4	4	Jeans	Clothing	2000.00
5	5	T-Shirt	Clothing	1000.00
6	6	Jacket	Clothing	2000.00
7	7	Apple	Groceries	100.00
8	8	Banana	Groceries	40.00
9	9	Mango	Groceries	100.00
10	1	Laptop	Electronics	80000.00
11	2	Mobile	Electronics	50000.00
12	3	Camera	Electronics	50000.00
13	4	Jeans	Clothing	2000.00
14	5	T-Shirt	Clothing	1000.00
15	6	Jacket	Clothing	2000.00
16	7	Apple	Groceries	100.00
17	8	Banana	Groceries	40.00
18	9	Mango	Groceries	100.00

Query executed successfully.

100 % 1 0

Results Messages

	ProductID	ProductName	Category	Price	RowNum
1	4	Jeans	Clothing	2000.00	1
2	6	Jacket	Clothing	2000.00	2
3	4	Jeans	Clothing	2000.00	3
4	1	Laptop	Electronics	80000.00	1
5	1	Laptop	Electronics	80000.00	2
6	2	Mobile	Electronics	50000.00	3
7	7	Apple	Groceries	100.00	1
8	7	Apple	Groceries	100.00	2
9	9	Mango	Groceries	100.00	3

100 % 5 0

Results Messages

	ProductID	ProductName	Category	Price	RowNum	RankNum	DenseRankNum
1	4	Jeans	Clothing	2000.00	1	1	1
2	6	Jacket	Clothing	2000.00	2	1	1
3	4	Jeans	Clothing	2000.00	3	1	1
4	6	Jacket	Clothing	2000.00	4	1	1
5	5	T-Shirt	Clothing	1000.00	5	5	2
6	5	T-Shirt	Clothing	1000.00	6	5	2
7	1	Laptop	Electronics	80000.00	1	1	1
8	1	Laptop	Electronics	80000.00	2	1	1
9	2	Mobile	Electronics	50000.00	3	3	2
10	3	Camera	Electronics	50000.00	4	3	2
11	2	Mobile	Electronics	50000.00	5	3	2
12	3	Camera	Electronics	50000.00	6	3	2
13	7	Apple	Groceries	100.00	1	1	1
14	7	Apple	Groceries	100.00	2	1	1
15	9	Mango	Groceries	100.00	3	1	1
16	9	Mango	Groceries	100.00	4	1	1
17	8	Banana	Groceries	40.00	5	5	2
18	8	Banana	Groceries	40.00	6	5	2

Query executed successfully.

