```sql
-- ------------------------------------------------------------------------
--                      SQL Analytics Project: Furniture Sales KPI Queries
-- ------------------------------------------------------------------------
/* Analysis 1: SQL Queries for Metrics
    Total Sales, Profit, Quantity, and Profit Margin */
-- ------------------------------------------------------------------------
SELECT
    'Total Sales' AS 'Measure', ROUND(SUM(sales),2) as 'KPIs Value'
FROM Furniture_Sales
UNION
SELECT
    'Total Profit', ROUND(SUM(Profit),2)
FROM Furniture_Sales
UNION
SELECT
    'Total Quantity', ROUND(SUM(Quantity),2)
FROM Furniture_Sales
UNION
SELECT
    'Total Profit', ROUND(SUM(Profit),2)
FROM Furniture_Sales
UNION
SELECT
    'Profit Margin %', ROUND(((SUM(sales)-SUM(Profit)) *100 /SUM(Sales)),2)
FROM Furniture_Sales

ORDER BY 'KPIs Value' DESC;
-- ------------------------------------------------------------------------
-- ------------------------------------------------------------------------
/* Analysis 2: Year over Year Comparison (YoY)
Total Sales, Profit, Quantity with YoY Change Using CTE + Window Function */
-- ------------------------------------------------------------------------
WITH YearlySales AS
    (SELECT
        YEAR(order_date) AS SalesYear,
        ROUND(SUM(sales),2) as SalesTotal,
        ROUND(SUM(Profit),2) as ProfitTotal,
        ROUND(SUM(Quantity),2) as QtyTotal
    FROM furniture_sales
    GROUP BY YEAR(order_date)),

SalesWithYoY AS
    (SELECT *,
        LAG(SalesTotal) OVER(ORDER BY SalesYear) as PrevYearSales,
        LAG(ProfitTotal) OVER(ORDER BY SalesYear) as PrevYearProfit,
        LAG(QtyTotal) OVER(ORDER BY SalesYear) as PrevYearQty
    FROM YearlySales)

SELECT
    SalesYear,
    SalesTotal,
    PrevYearSales,
        CASE WHEN ROUND((SalesTotal - PrevYearSales) * 100 / SalesTotal, 2) IS NULL↵

            THEN ''
            ELSE CONCAT(ROUND((SalesTotal - PrevYearSales) * 100 / SalesTotal,     ↵
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            2),'%')
        END AS YoYSalesChangePct,
    ProfitTotal,
    PrevYearProfit,
        CASE WHEN ROUND((ProfitTotal - PrevYearProfit) * 100 / ProfitTotal, 2) IS
          NULL
            THEN ''
            ELSE CONCAT(ROUND((ProfitTotal - PrevYearProfit) * 100 / ProfitTotal,
              2),'%')
        END AS YoYProfitChangePct,
    QtyTotal,
    PrevYearQty,
        CASE WHEN ROUND((QtyTotal - PrevYearQty) * 100 / QtyTotal, 2) IS NULL
            THEN ''
            ELSE CONCAT(ROUND((QtyTotal - PrevYearQty) * 100 / QtyTotal, 2),'%')
        END AS YoYQtyChangePct
FROM  SalesWithYoY;
-- ---------------------------------------------------------------------------
-- ---------------------------------------------------------------------------
/* Analysis 3: Month over Month Comparison (MoM)
    Monthly Sales Trend with Month-over-Month (MoM) Growth */
-- ---------------------------------------------------------------------------
WITH MonthlySales AS
    (SELECT
        FORMAT(order_date, 'yyyy-MMM') AS SalesMonth,
        ROUND(SUM(sales),2) as SalesTotal
    FROM furniture_sales
    GROUP BY FORMAT(order_date, 'yyyy-MMM')
    ),

SalesWithMoM AS
    (SELECT *,
        LAG(SalesTotal) OVER(ORDER BY SalesMonth) AS PrevMonthSales
    FROM MonthlySales)

SELECT
    SalesMonth,
    SalesTotal,
    PrevMonthSales,
        CASE WHEN ROUND((SalesTotal - PrevMonthSales) * 100 / SalesTotal, 2) IS
          NULL
            THEN ''
            ELSE CONCAT(ROUND((SalesTotal - PrevMonthSales) * 100 / SalesTotal,
              2),'%')
        END AS MoMChangePct
FROM SalesWithMoM;
-- ---------------------------------------------------------------------------
-- ---------------------------------------------------------------------------
/* Analysis 4: Top 5 Cities by Sales */
-- ---------------------------------------------------------------------------
SELECT TOP 5
    City,
    SUM(Sales) AS TotalSales
FROM furniture_sales
GROUP BY City
ORDER BY TotalSales DESC;
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```sql
-- Shipping Mode Distribution
SELECT
    Ship_Mode,
    COUNT(*) AS OrderCount,
    CONCAT(
        LEFT
            (ROUND(100.0 * COUNT(*) / SUM(COUNT(*)) OVER (), 2),5),
    '%') AS PercentageOfOrders
FROM furniture_sales
GROUP BY Ship_Mode
ORDER BY OrderCount DESC;

-- Shipping Duration Breakdown
SELECT
    ShippingDuration,
    COUNT(*) AS TotalOrders,
    CONCAT(
        LEFT(ROUND(100.0 * COUNT(*) / SUM(COUNT(*)) OVER (), 2),4),
    '%') AS PercentTotal
FROM
    (
        SELECT DATEDIFF(DAY, Order_Date, Ship_Date) AS ShippingDuration
        FROM furniture_sales
    ) AS DurationTable

GROUP BY ShippingDuration
ORDER BY ShippingDuration;
-- ------------------------------------------------------------------------------
-- ------------------------------------------------------------------------------
/* Analysis 5: Sales by Region and Segment */
-- ------------------------------------------------------------------------------
-- Region Breakdown
SELECT
    Region,
    SUM(Sales) AS TotalSales
FROM furniture_sales
GROUP BY Region
ORDER BY TotalSales DESC;


-- Segment Breakdown
SELECT
    Segment,
    SUM(Sales) AS TotalSales
FROM furniture_sales
GROUP BY Segment
ORDER BY TotalSales DESC;


WITH RegionSegmentSales AS
    (SELECT
        Region,
        Segment,
        SUM(Sales) AS TotalSales
```

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    FROM furniture_sales
    GROUP BY Region, Segment)
SELECT *
FROM RegionSegmentSales
ORDER BY Region, Segment, TotalSales DESC;
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-- ---------------------------------------------------------------------------
/* Analysis 6: Top 3 Categories by Sales Using DENSE_RANK() */
-- ---------------------------------------------------------------------------
WITH CategorySales AS (
    SELECT
        Sub_Category,
        SUM(Sales) AS TotalSales
    FROM furniture_sales
    GROUP BY Sub_Category
),
Ranked AS (
    SELECT *,
        DENSE_RANK() OVER (ORDER BY TotalSales DESC) AS RankBySales
    FROM CategorySales
)
SELECT *
FROM Ranked
WHERE RankBySales <= 2;
-- ---------------------------------------------------------------------------
```