

```
CREATE DATABASE KMS_Orders;  
GO
```

```
USE KMS_Orders;  
Go
```

```
----- Creating Table ---
```

```
CREATE TABLE KMS(  
Row_ID INT PRIMARY KEY,  
Order_ID INT ,  
Order_Date DATE,  
Order_Priority NVARCHAR(100),  
Order_Quantity INT,  
Sales Decimal(10,2),  
Discount Decimal(4,2),  
Ship_Mode VARCHAR(50),  
Profit Decimal(10,2),  
Unit_Price Decimal(10,2),Shipping_Cost Decimal(10,2),  
Customer_Name VARCHAR(100),  
Province VARCHAR(50),  
Region VARCHAR(50),  
Customer_Segment VARCHAR(50),  
Product_Category VARCHAR(50),  
Product_Sub_Category VARCHAR(100),  
Product_Name NVARCHAR(100),  
Product_Container NVARCHAR(50),  
Product_Base_Margin Decimal(4,2),  
Ship_Date DATE  
);
```

```
----Product Category with Highest Sales ----
```

```
SELECT TOP 3 Product_category, SUM(Sales) AS Total_Sales  
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]  
GROUP BY Product_category  
ORDER BY Total_Sales DESC;
```

```
---- Top 3 regions by sales ----
```

```
SELECT TOP 3 Region, SUM(Sales) AS Total_Sales  
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]  
GROUP BY Region  
ORDER BY Total_Sales DESC;
```

```
---- Bottom 3 regions by sales ----
```

```
SELECT TOP 3 region, SUM(Sales) AS Total_Sales  
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
```

```
GROUP BY Region
ORDER BY Total_Sales ASC;
```

---- Total sales of appliances in Ontario ----

```
SELECT SUM(Sales) AS Total_Sales
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
WHERE Product_Category = 'Appliances' AND Province = 'Ontario';
```

---- Bottom 10 customers by total revenue ----

```
SELECT TOP 10 Customer_Name, SUM(Sales) AS Total_Sales
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
GROUP BY Customer_Name
ORDER BY total_sales ASC;
```

---- Shipping method with highest cost ----

```
SELECT TOP 1 Ship_Mode, SUM(Shipping_Cost) AS Total_Shipping_Cost
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
GROUP BY Ship_Mode
ORDER BY Total_Shipping_cost DESC;
```

---- Most valuable customers and what they purchase -----

```
WITH Top_Customers AS (
    SELECT TOP 10 Customer_Name
    FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
    GROUP BY Customer_Name
    ORDER BY SUM(Sales)
    DESC )

SELECT o.Customer_Name, o.Product_Category, SUM(o.Sales) AS Total_Sales
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy] o
JOIN Top_Customers t ON o.Customer_Name = t.Customer_Name
GROUP BY o.Customer_Name, o.Product_Category
ORDER BY o.Customer_Name, Total_Sales DESC;
```

---- Top small business customer by sales ----

```
SELECT TOP 1 Customer_Name, SUM(Sales) AS Total_Sales
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
WHERE Customer_Segment = 'Small Business'
GROUP BY Customer_Name
ORDER BY Total_Sales DESC;
```

---- Corporate customer with most orders (2009-2012) ----

```
SELECT TOP 1 k.Customer_Name, COUNT(k.Order_ID) AS Order_Count
FROM [dbo].[KMSSqlCaseStudy] k
```

```
JOIN [dbo].[Order_Status] o ON k.Order_ID = o.Order_ID
WHERE k.Customer_Segment = 'Corporate'
      AND YEAR(k.Order_Date) BETWEEN 2009 AND 2012
GROUP BY k.Customer_Name
ORDER BY Order_Count DESC;
```

---- Most profitable consumer customer ----

```
SELECT TOP 1 customer_name, SUM(Profit) AS total_profit
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
WHERE Customer_Segment = 'Consumer'
GROUP BY Customer_Name
ORDER BY Total_Profit DESC;
```

---- Customers who returned items (negative profit) ----

```
SELECT DISTINCT Customer_Name, Customer_Segment
FROM [dbo].[Order_Status],[dbo].[KMSSqlCaseStudy]
WHERE Profit < 0;
```

---- Shipping cost vs order priority ----

```
SELECT Order_Priority, Ship_Mode,
       AVG(Shipping_Cost) AS Avg_Shipping_Cost,
       COUNT(Order_ID) AS Total_Orders
FROM [dbo].[KMSSqlCaseStudy]
GROUP BY Order_Priority, Ship_Mode;
```