Create Database [Kultra\_Mega\_Stores\_Inventory\_DB]

-----Import Tables---

---CSV Table 1. [dbo].[KMS Sql Case Study]

---CSV table 2. [dbo].[Order\_Status]

------------Tables........

Select \* From [dbo].[KMS Sql Case Study]

Select \* From [dbo].[Order\_Status]

------- Create Table View -------

CREATE VIEW vw\_dbokmsdboord

AS

SELECT

kms.[Row\_ID],

kms.[Order\_ID],

kms.[Order\_Date],

kms.[Order\_Priority],

kms.[Order\_Quantity],

kms.[Sales],

kms.[Discount],

kms.[Ship\_Mode],

kms.[Shipping\_Cost],

kms.[Customer\_Name],

kms.[Province],

kms.[Region],

kms.[Customer\_Segment],

kms.[Product\_Category],

kms.[Product\_Sub\_Category],

kms.[Product\_Name],

kms.[Product\_Container],

kms.[Product\_Base\_Margin],

kms.[Ship\_Date],

ord.[status]

From [dbo].[KMS Sql Case Study] kms

inner join [dbo].[Order\_Status] ord

on kms.Order\_ID = ord.Order\_ID

-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

------Update View------

UPDATE [dbo].[vw\_dbokmsdboord]

SET [Product\_Base\_Margin] = COALESCE([Product\_Base\_Margin], 0.00)

WHERE [Product\_Base\_Margin] IS NULL

----Question 1: Which product category had the highest sales?

Select Top 1

Product\_Category,

Sum(Sales) As Total\_Sales

From [dbo].[vw\_dbokmsdboord]

Group by Product\_Category

Order by Total\_Sales Desc

-----Answer: Product Category = (Technology) --- Sales = $605,426.04

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----Question 2: What are the top 3 and bottom 3 regions in terms of sales------

--Top 3

select Top 3

Region,

Sum(Sales) As Total\_Sales

From [dbo].[vw\_dbokmsdboord]

Group by Region

Order by Total\_Sales Desc

---Answer: Top 3 Regions; Ontario = $471,161.63 / West = $375,122.37 / Prarie = $296,732.24

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--Bottom 3

select Top 3

Region,

Min(Sales) As Total\_Sales

From [dbo].[KMSORDER]

Group by Region

Order by Total\_Sales Asc

---Answer: B0ttom 3 Regions; Ontario = $4.94, West = $5.06, Prarie $5.63

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----Quest 3: What were the total sales of appliances in Ontario?

SELECT Region,

SUM(Sales) AS Total\_Sales

FROM [dbo].[vw\_dbokmsdboord]

WHERE Region = 'Ontario'

And Product\_Sub\_Category = 'appliances'

Group By Region

---Answer: = Total Sales of Appliances in Ontario = $17,648.37

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-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

----- Question 4: Advise the management of KMS on what to do to increase the revenue from the bottom 10 customer

Select Top 10

Customer\_Name,

Sum(Sales) As Total\_Revenue

From [dbo].[vw\_dbokmsdboord]

Group by Customer\_Name

Order by Total\_Revenue Asc

--------- BOTTOM 10 CUSTOMERS-----------------------

--Customer Name Total Sales

--John Grady = $5.06

--Frank Atkinson = $10.48

--Sean Wendt = $12.80

--Sandra Glassco = $16.24

--Katherine Hughes = $17.77

--Bobby Elias = $22.56

--Noel Staavos = $24.91

--Thomas Boland = $28.01

--Brad Eason = $435.17

--Theresa Swint = $38.51

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---Answer: MY ADVISE TO THE MANAGEMENT OF KMS IN ORDER TO INCREASE THE REVENUE FROM THE BOTTOM 10 CUSTOMERS......................

------- a- Identify the bottom 10 customers by total sales.

--------b- Analyze purchase patterns and feedback.

--------c- Offer targeted promotions or loyalty incentives.

--------d- Assign dedicated account managers or support for better engagement.

--------e- Upsell or cross-sell complementary products.

--------f- Improve delivery timelines and customer service.

-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

---Question 5: KMS incurred the most shipping cost using which shipping method?

Select Top 1

Order\_Priority, Ship\_Mode,

Sum(Shipping\_Cost) As Total\_Cost

From [dbo].[KMSORDER]

Group by Order\_Priority, Ship\_Mode

Order by Total\_Cost Desc

---Answer: Order\_Priority = (Low) / Shiping Method = Delevery Struck / Shipping Cost = $1,659.14

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------Question 6: Who are the most valuable customers, and what products or services do they typically purchase?

WITH CustomerRevenue AS (

SELECT

Customer\_Name,

Customer\_Segment,

SUM(Sales) AS Total\_Revenue

FROM [dbo].[vw\_dbokmsdboord]

GROUP BY Customer\_Name, Customer\_Segment

),

CustomerProductRevenue AS (

SELECT

Customer\_Name,

Product\_Name,

Order\_Quantity,

SUM(Sales) AS Product\_Revenue,

ROW\_NUMBER() OVER (

PARTITION BY Customer\_Name

ORDER BY SUM(Sales) DESC, Product\_Name DESC

) AS Product\_Rank

FROM [dbo].[vw\_dbokmsdboord]

GROUP BY Customer\_Name, Product\_Name, Order\_Quantity

)

SELECT TOP 5

cr.Customer\_Name,

cr.Customer\_Segment,

cpr.Product\_Name AS Top\_Product,

cpr.Order\_Quantity,

cr.Total\_Revenue

FROM CustomerRevenue cr

JOIN CustomerProductRevenue cpr

ON cr.Customer\_Name = cpr.Customer\_Name

AND cpr.Product\_Rank = 1

ORDER BY cr.Total\_Revenue DESC

----Answer: We have our Top 5, having that the (top product that are being purchased are as follow:

------Customer\_Name Customer\_Segment Top\_Product Total\_Revenue

---1---John Lucas Small Business Chromcraft Bull-Nose Wood 48" x 96" Rectangular Conference Tables $37,919.43

---2---Lycoris Saunders Corporate Bretford CR8500 Series Meeting Room Furniture $30,948.18

---3---Peter Fuller Corporate Panasonic KX-P3626 Dot Matrix Printer $26,485.12

---4---Julia West Home Office Riverside Palais Royal Lawyers Bookcase, Royale Cherry Finish $26,443.02

---5---Darren Budd Home Office Sharp AL-1530CS Digital Copier $26,382.21

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-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

---Question 7: Which (Small business customer) had the highest sales?

WITH CustomerRevenue AS (

SELECT

Customer\_Name,

Customer\_Segment,

SUM(Sales) AS Total\_Revenue

FROM [dbo].[vw\_dbokmsdboord]

Where Customer\_Segment = 'Small Business'

GROUP BY Customer\_Name, Customer\_Segment

),

CustomerProductRevenue AS (

SELECT

Customer\_Name,

Product\_Name,

Order\_Quantity,

SUM(Sales) AS Product\_Revenue,

ROW\_NUMBER() OVER (

PARTITION BY Customer\_Name

ORDER BY SUM(Sales) DESC, Product\_Name DESC

) AS Product\_Rank

FROM [dbo].[vw\_dbokmsdboord]

GROUP BY Customer\_Name, Product\_Name, Order\_Quantity

)

SELECT TOP 1

cr.Customer\_Name,

cr.Customer\_Segment,

cpr.Product\_Name AS Top\_Product,

cpr.Order\_Quantity,

cr.Total\_Revenue

FROM CustomerRevenue cr

JOIN CustomerProductRevenue cpr

ON cr.Customer\_Name = cpr.Customer\_Name

AND cpr.Product\_Rank = 1

ORDER BY cr.Total\_Revenue DESC

---Answer: The Custormer\_Segment = (Small Business) / Customer\_Name = (John Lucas) / Total\_Revenue = $37,919.43

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-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

----Question 8: Which (Corporate Customer) placed the most (number of orders) in (2009 – 2012)?

SELECT TOP 1

Customer\_Segment, Customer\_Name,

SUM(Order\_Quantity) AS Total\_Orders

FROM [dbo].[vw\_dbokmsdboord]

WHERE Customer\_Segment = 'Corporate'

AND Ship\_Date BETWEEN '2009-01-01' AND '2012-12-31'

GROUP BY Customer\_Segment, Customer\_Name

ORDER BY Total\_Orders DESC

----Answer: The corporate customer with the most placed order in 2009 - 2012 Is; Customer\_Name = Erin Creighton, Total\_Orders = 261

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---Question 9: Which (Consumer customer) was the (most profitable one)?

SELECT TOP 1

Customer\_Segment, Customer\_Name,

SUM(Sales) AS Total\_Revenue

FROM [dbo].[vw\_dbokmsdboord]

WHERE Customer\_Segment = 'Consumer'

GROUP BY Customer\_Segment, Customer\_Name

ORDER BY Total\_Revenue Desc

---Answer: The most profitable (Consumer Customer); Customer\_Name = Darren Budd / Profitability = $23,034.35

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-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

----Question 10: Which customer returned items? And what segment do they belong to?

SELECT TOP 872

Customer\_Name, Customer\_Segment,

max([Status]) AS Total\_Returned\_Items

FROM [dbo].[vw\_dbokmsdboord]

GROUP BY Customer\_Segment, Customer\_Name, [Status]

ORDER BY Total\_Returned\_Items Desc

----Answer: Customers that (Returned Items) According to their (Segment);

--- Customer\_Name Customer\_Segment Total\_Returned\_Items

--1---Christy Brittain Consumer Returned

--2---Charles Crestani Consumer Returned

--3---Carlos Soltero Consumer Returned

--4---Carl Weiss Consumer Returned

--5---Brian Stugart Consumer Returned

--6---Brendan Sweed Consumer Returned

--7---Becky Castell Consumer Returned

--8---Anthony O'Donnell Consumer Returned

--9---Annie Thurman Consumer Returned

--10--Anne Pryor Consumer Returned......................

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-----Question 11....

---If the delivery truck is the most economical but the slowest shipping method and

---Express Air is the fastest but the most expensive one, do you think the company

---appropriately spent shipping costs based on the Order Priority? (Explain your answer)

-----Select View------

Select \* From [dbo].[vw\_dbokmsdboord]

SELECT

Order\_Priority,

Ship\_Mode,

SUM(Shipping\_Cost) AS Total\_Cost

FROM [dbo].[KMSORDER]

WHERE Ship\_Mode IN ('Express Air', 'Delivery Truck')

GROUP BY Order\_Priority, Ship\_Mode

ORDER BY Ship\_Mode, Total\_Cost DESC

----Answer: Based on Order Priority Ship Mode Total Cost

----- Low Delivery Truck $1,659.14

----- High Delivery Truck $1,274.98

----- Not Specified Delivery Truck $1,040.76

----- Medium Delivery Truck $925.25

----- Critical Delivery Truck $829.01

----- Low Express Air $289.95

----- Not Specified Express Air $257.40

----- Critical Express Air $195.19

----- Medium Express Air $167.27

----- High Express Air $108.92

------Was shipping cost appropriately spent based on Order Priority?

----a- Appropriate spending depends on matching high-priority orders with fast (Express Air) shipping and low-priority orders with economical (Delivery Truck) methods.

----b- If there are mismatches (e.g., urgent items shipped via Delivery Truck), the spending is inappropriate.

----c- A proper audit of the data would confirm alignment.