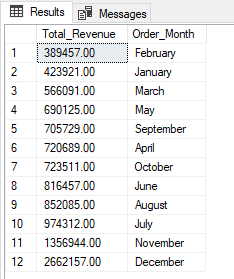
E-commerce Sales SQL Queries

1. **Monthly Revenue Growth:**select SUM(Ecommerce\_Sales.Total\_Price) as Total\_Revenue,DATENAME(MM,Ecommerce\_Sales.Order\_Date) as Order\_Month from Ecommerce\_Sales

group by DATENAME(MM,Ecommerce\_Sales.Order\_Date)

order by Total\_Revenue;

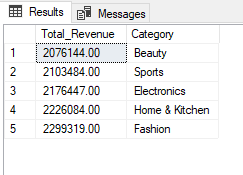


1. **Revenue by Product Category :**

select SUM(Ecommerce\_Sales.Total\_Price) as Total\_Revenue,Ecommerce\_Sales.Category from Ecommerce\_Sales

group by Ecommerce\_Sales.Category

order by Total\_Revenue;

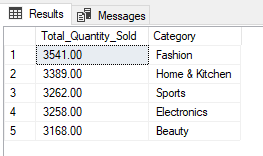


1. **Best Selling category:**

SELECT sum(Ecommerce\_Sales.Quantity) as Total\_Quantity\_Sold, Ecommerce\_Sales.Category FROM Ecommerce\_Sales

group by Ecommerce\_Sales.Category

order by Total\_Quantity\_Sold desc;

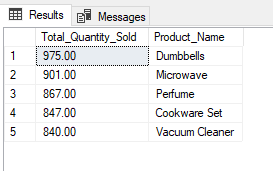
****

1. **Top 5 Best Selling Product:**

select top 5 SUM(Ecommerce\_Sales.Quantity) as Total\_Quantity\_Sold, Ecommerce\_Sales.Product\_Name from Ecommerce\_Sales

group by Ecommerce\_Sales.Product\_Name

order by Total\_Quantity\_Sold desc

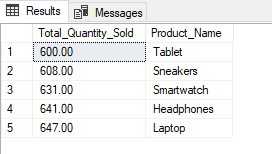


1. **Bottom 5 Worst selling Product:**

select top 5 SUM(Ecommerce\_Sales.Quantity) as Total\_Quantity\_Sold, Ecommerce\_Sales.Product\_Name from Ecommerce\_Sales

group by Ecommerce\_Sales.Product\_Name

order by Total\_Quantity\_Sold asc

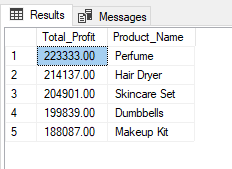
****

1. **Top 5 most profitable product:**

select top 5 SUM(Ecommerce\_Sales.Profit) as Total\_Profit, Ecommerce\_Sales.Product\_Name from Ecommerce\_Sales

group by Ecommerce\_Sales.Product\_Name

order by Total\_Profit desc

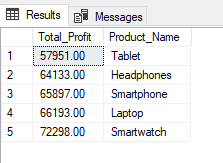
****

1. **Bottom 5 least profitable product:**

select top 5 SUM(Ecommerce\_Sales.Profit) as Total\_Profit, Ecommerce\_Sales.Product\_Name from Ecommerce\_Sales

group by Ecommerce\_Sales.Product\_Name

order by Total\_Profit asc

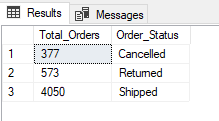
****

1. **Shipped vs Cancelled vs Returned Orders:**

select count(Ecommerce\_Sales.Order\_ID) as Total\_Orders, Ecommerce\_Sales.Order\_Status from Ecommerce\_Sales

group by Ecommerce\_Sales.Order\_Status

order by Total\_Orders asc



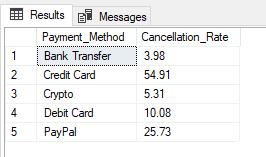
1. **Cancellation Rate by Payment method:**

select Ecommerce\_Sales.Payment\_Method,

cast (cast (COUNT(Ecommerce\_Sales.Order\_ID) as decimal(10,2)) \* 100/ cas ((select COUNT(Ecommerce\_Sales.Order\_ID) from Ecommerce\_Sales where Ecommerce\_Sales.Order\_Status = 'Cancelled' ) as decimal(10,2)) as decimal(10,2) )as Cancellation\_Rate from Ecommerce\_Sales

where Ecommerce\_Sales.Order\_Status = 'Cancelled'

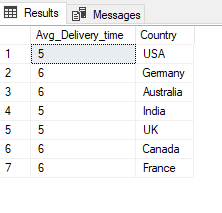
group by Ecommerce\_Sales.Payment\_Method



1. **Avg delivery time by region:**

select AVG(Ecommerce\_Sales.Delivery\_Time\_Days) as Avg\_Delivery\_time,Ecommerce\_Sales.Country from Ecommerce\_Sales

group by Ecommerce\_Sales.Country



1. **Customer RFM Model;**

with rfm\_base as (

select Ecommerce\_Sales.Customer\_ID,Ecommerce\_Sales.Customer\_Name, COUNT(Ecommerce\_Sales.Order\_ID) as frequency,

SUM(Ecommerce\_Sales.Total\_Price) as monetary\_Value,MAX(Ecommerce\_Sales.Order\_Date) as last\_Purchase\_date

from Ecommerce\_Sales

group by Ecommerce\_Sales.Customer\_ID,Ecommerce\_Sales.Customer\_Name)

,

rfm\_Score as(

select rfm\_base.Customer\_ID,rfm\_base.Customer\_Name, rfm\_base.Frequency, rfm\_base.Monetary\_Value, DATEDIFF(DD,rfm\_base.last\_Purchase\_date,

(select MAX(Ecommerce\_Sales.Order\_Date) from Ecommerce\_Sales)) as Recency from rfm\_base)

,

rfm\_Rank as(

select rfm\_Score.Customer\_ID, rfm\_Score.Customer\_Name,

NTILE(5) over (order by rfm\_Score.Recency desc) as R\_Score,

NTILE(5) over (order by rfm\_Score.Frequency asc)as F\_Score,

NTILE(5) over (order by rfm\_Score.Monetary\_Value asc) as M\_Score

from rfm\_Score)

select rfm\_Rank.Customer\_ID, rfm\_Rank.Customer\_Name, rfm\_Rank.R\_Score,rfm\_Rank.F\_Score,rfm\_Rank.M\_Score,

(CAST(rfm\_Rank.R\_Score as varchar) + CAST(rfm\_Rank.F\_Score as varchar) + CAST(rfm\_Rank.M\_Score as varchar)) as RFM\_Analysis,

CASE

when (CAST(rfm\_Rank.R\_Score as varchar) + CAST(rfm\_Rank.F\_Score as varchar) + CAST(rfm\_Rank.M\_Score as varchar)) in ('555', '554', '545', '544') then 'Best Customer'

when (CAST(rfm\_Rank.R\_Score as varchar) + CAST(rfm\_Rank.F\_Score as varchar) + CAST(rfm\_Rank.M\_Score as varchar)) in ('511', '522', '533') then 'Loyal Customer'

when (CAST(rfm\_Rank.R\_Score as varchar) + CAST(rfm\_Rank.F\_Score as varchar) + CAST(rfm\_Rank.M\_Score as varchar)) in ('311', '322', '211') then 'At Risk'

when (CAST(rfm\_Rank.R\_Score as varchar) + CAST(rfm\_Rank.F\_Score as varchar) + CAST(rfm\_Rank.M\_Score as varchar)) in ('555', '112', '121') then 'lost Customer'

else 'regular Customer'

end as Customer\_Segment

from rfm\_Rank

order by RFM\_Analysis desc;