

Project Name – Ecommerce Orders & Shipment Analysis

The Dataset contain 4 tables are **products_df**, **orders_df**, **shipments_df**, **suppliers_df**

The SQL Queries are

#Total_Quantity

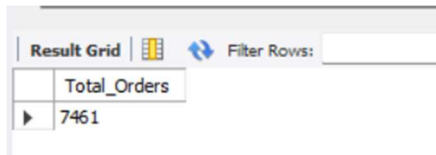
```
select sum(Quantity) as Total_Quantity from orders_df;
```



Total_Quantity
3778933

#Total_Orders

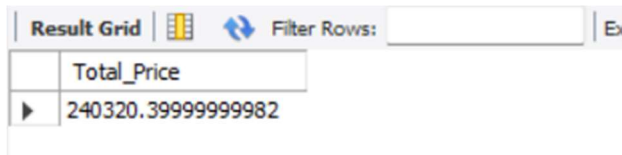
```
select count(distinct OrderID) as Total_Orders from orders_df;
```



Total_Orders
7461

#Total_Price

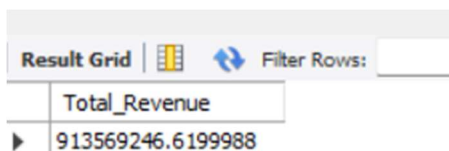
```
select sum(UnitPriceUSD) as Total_Price from products_df;
```



Total_Price
240320.39999999982

#Total_Revenue

```
select sum(p.UnitPriceUSD * o.Quantity) as Total_Revenue  
from products_df as p  
join orders_df as o  
on p.ProductID= o.ProductID;
```



Total_Revenue
913569246.6199988

#Delivered_Orders

```
select count(*) as Delivered_Orders from orders_df  
where OrderStatus='Delivered';
```

Delivered_Orders
3332

#Cancelled_Orders

```
select count(*) as Cancelled_Orders from orders_df
where OrderStatus='Cancelled';
```

Cancelled_Orders
375

#Pending_Orders

```
select count(*) as Pending_Orders from orders_df
where OrderStatus='Pending';
```

Pending_Orders
1449

#Average_Orders

```
select (sum(Quantity) / COUNT(DISTINCT OrderID)) as Avg_Order
from orders_df;
```

Avg_Order
506.4914890765313

how many customer orders were successfully fulfilled

```
SELECT
    (COUNT(CASE WHEN OrderStatus = 'Delivered' THEN 1 END) * 100.0)
    / COUNT(DISTINCT OrderID) AS Fulfillment_Rate
FROM orders_df;
```

Fulfillment_Rate
44.65889

#Revenue Per ProductID

```
select p.ProductID, p.UnitPriceUSD,o.Quantity ,sum(p.UnitPriceUSD * o.Quantity) as Revenue
from products_df as p
```

join orders_df as o

on p.ProductID= o.ProductID

group by p.ProductID, p.UnitPriceUSD,o.Quantity ;

	ProductID	UnitPriceUSD	Quantity	Revenue
▶	P0978	491.94	519	510633.72
	P0493	494.15	990	489208.5
	P0829	498.54	971	484082.34
	P0235	488.39	990	483506.1
	P0876	495.88	974	482987.12
	P0974	485.41	991	481041.31
	P0744	400.00	974	477500.00

Average Delivery Time (days)

Select AVG(DATEDIFF(DeliveryDate, ShipDate)) AS AvgDeliveryDays

FROM shipments_df

WHERE DeliveryDate IS NOT NULL;

	AvgDeliveryDays
▶	17.1902

#Avg_Shipping_Cost

select (sum(s.ShippingCostUSD) / count(distinct o.OrderID)) as Avg_Shipping_Cost

from orders_df as o

join shipments_df as s

on o.OrderID = s.OrderID;

	Avg_Shipping_Cost
▶	971.4181195550207

Shipping Cost by Mode – Air, Sea, Road, Rail

select ShippingMode, sum(ShippingCostUSD) as Total_Shipping_Cost

from shipments_df

group by ShippingMode

order by Total_Shipping_Cost desc;

	ShippingMode	Total_Shipping_Cost
►	Air Freight	2520815.8999999943
	Rail	2504456.5800000005
	Road	2377424.48
	Sea Freight	2330919.11

Shipment Mode which are delivered

```
select ShippingMode, count(case when Delivered='True' then 1 End) as Delivereds
from shipments_df
group by ShippingMode
order by Delivereds desc;
```

	ShippingMode	Delivereds
►	Rail	1203
	Air Freight	1193
	Road	1070
	Sea Freight	1062

which Category generates the highest Total Revenue

```
select p.Category, sum(p.UnitPriceUSD * o.Quantity) as Total_Revenue
from products_df as p
join orders_df as o
on p.ProductID = o.ProductID
group by p.Category
order by Total_Revenue desc;
```

	Category	Total_Revenue
►	Cables	166130214.72000003
	Components	164997243.07999998
	Power Units	147263478.67000014
	Display Units	146410530.3300002
	Controllers	144685789.5500001
	Sensors	144081990.26999986

which Category generates the highest Orders

```
select p.Category, count(distinct o.OrderID) as Total_Orders
from products_df as p
join orders_df as o
```

```
on p.ProductID = o.ProductID
group by p.Category
order by Total_Orders desc;
```

	Category	Total_Orders
▶	Cables	1305
	Components	1253
	Sensors	1228
	Display Units	1172
	Controllers	1140
	Power Units	1131

which Category has highest quantities sold

```
select p.Category, Sum(o.Quantity) as Total_Quantity
from products_df as p
join orders_df as o
on p.ProductID = o.ProductID
group by p.Category
order by Total_Quantity desc;
```

	Category	Total_Quantity
▶	Cables	668497
	Components	645973
	Sensors	608309
	Display Units	586138
	Controllers	580089
	Power Units	573168

#Highest Revenue by Warehouse

```
select o.Warehouse, sum(p.UnitPriceUSD * o.Quantity) as Total_Revenue
from products_df as p
join orders_df as o
on p.ProductID = o.ProductID
group by o.Warehouse
order by Total_Revenue desc;
```

Result Grid Filter Rows:		
	Warehouse	Total_Revenue
►	Berlin	162365852.76999968
	Mumbai	155978029.28000018
	London	155197165.0800001
	Tokyo	149743438.3999999
	Shanghai	149698295.7200002
	New York	140586465.36999992

Which Supplier and Country is making high Revenue

```

select s.SupplierID, s.Country, sum(p.UnitPriceUSD * o.Quantity) as Total_Revenue
from products_df as p
join orders_df as o
on p.ProductID = o.ProductID
join suppliers_df as s
on p.SupplierID=s.SupplierID
group by s.SupplierID, s.Country
order by Total_Revenue desc;

```

Result Grid Filter Rows:			
	SupplierID	Country	Total_Revenue
►	S048	South K...	9066652.379999997
	S027	Brazil	9688537.200000005
	S019	UK	10046933.119999997
	S025	USA	10956698.849999994
	S028	India	12366783.210000006
	S050	Brazil	12755476.459999999

Which Category has highest StockLevel

```

select Category, sum(StockLevel) as In_Shock
from products_df
group by Category
order by In_Shock desc;

```

Result Grid Filter R		
	Category	In_Shock
►	Cables	473208
	Display Units	453728
	Components	425417
	Sensors	418352
	Controllers	389185
	Power Units	364202

Which SupplierID has highest StockLevel

```
select SupplierID, sum(StockLevel) as In_Shock  
from products_df  
group by SupplierID  
order by In_Shock desc;
```

	SupplierID	In_Shock
►	S015	71318
	S002	70010
	S011	68079
	S025	67936
	S017	66570
	S040	66247