

*Database Using SQL Server & Raw Data available over  
my GitHub Profile*



PostgreSQL

# VIEW With 12 Most Used Queries



AnshLibrary



# What is a VIEW

A **View** is a **virtual table** based on the result of a SQL query. It doesn't store data physically but fetches it dynamically from underlying tables.

Think of it as a **stored SELECT query** that can simplify complex joins or business logic.

## Syntax of VIEW:

```
CREATE VIEW view_name AS  
SELECT columns  
FROM tables  
WHERE condition;
```

## Select from a view

```
SELECT * FROM view_name;
```

## Join a view with a table

```
SELECT e.FirstName, v.*  
FROM Employees e  
JOIN vw_TotalSalesPerEmployee v ON  
e.Employee_id = v.SalesPersonID;
```



# 01

## Customer Lifetime Sales View

**CREATE VIEW vw\_CustomerLifetimeSales AS  
SELECT**

**c.Customer\_id,  
CONCAT(c.First\_Name, ' ', c.Last\_Name) AS CustomerName,  
c.Country,  
COUNT(o.OrderID) AS TotalOrders,  
SUM(o.Sales) AS LifetimeSales,  
MAX(o.OrderDate) AS LastOrderDate**

**FROM Customers c  
JOIN Orders o ON c.Customer\_id = o.CustomerID  
GROUP BY c.Customer\_id, c.First\_Name, c.Last\_Name, c.Country;**

We can fetch this VIEW with this query :

**Select \* from vw\_CustomerLifetimeSales**

Results		Messages				
	Customer_id	CustomerName	Country	TotalOrders	LifetimeSales	LastOrderDate
1	1	Jossef Goldberg	Germany	6	605.00	2025-07-17
2	2	Kevin Brown	USA	6	274.00	2025-07-12
3	3	Mary	USA	7	679.00	2025-07-19
4	4	Mark Schwarz	Germany	6	840.00	2025-07-18
5	5	Anna Adams	USA	3	347.00	2025-07-14
6	6	Emily Clark	Canada	1	180.00	2025-07-15
7	9	Carlos Ramirez	Mexico	1	280.00	2025-07-20

Use by: CRM & Loyalty Systems



**AnshLibrary**



# 02

## Sales Funnel Monitoring View

```
CREATE VIEW vw_SalesFunnel AS
SELECT
    OrderStatus,
    COUNT(OrderID) AS TotalOrders,
    SUM(Sales) AS TotalValue
FROM Orders
GROUP BY OrderStatus;
```

Select \* from vw\_SalesFunnel

Results		Messages	
	OrderStatus	TotalOrders	TotalValue
1	Awaiting Payment	1	132.00
2	Cancelled	1	260.00
3	Delivered	8	545.00
4	Dispatched	2	310.00
5	Failed	1	55.00
6	Hold	1	99.00
7	In Transit	1	66.00
8	On Hold	1	220.00
9	Packed	2	317.00
10	Preparing	1	88.00
11	Processing	1	280.00
12	Refunded	1	143.00
13	Returned	1	44.00
14	Shipped	7	525.00
15	Unconfirmed	1	121.00

Use by: Sales & Marketing Teams



AnshLibrary



# 03

## Delayed Shipments View

```
CREATE VIEW vw_DelayedShipments AS
SELECT
    OrderID,
    DATEDIFF(DAY, OrderDate, ShipDate) AS DaysToShip,
    CustomerID, SalesPersonID, Sales
FROM Orders
WHERE DATEDIFF(DAY, OrderDate, ShipDate) > 7;
```

Select \* from vw\_DelayedShipments

	OrderID	DaysToShip	CustomerID	SalesPersonID	Sales
1	3	15	1	5	20.00
2	7	12	1	1	30.00
3	8	9	4	3	90.00

Use by: Logistics or Delivery Ops



AnshLibrary



# 04

## Weekly Sales Trend View

*CREATE VIEW vw\_WeeklySalesTrend AS  
SELECT*

*DATEPART(YEAR, OrderDate) AS Year,  
DATEPART(WEEK, OrderDate) AS Week,  
SUM(Sales) AS WeeklyRevenue*

*FROM Orders  
GROUP BY  
DATEPART(YEAR, OrderDate), DATEPART(WEEK, OrderDate);*

*Select \* from vw\_WeeklySalesTrend*

Results		Messages	
	Year	Week	WeeklyRevenue
1	2025	1	10.00
2	2025	2	35.00
3	2025	4	60.00
4	2025	5	25.00
5	2025	6	50.00
6	2025	7	30.00
7	2025	8	90.00
8	2025	11	80.00
9	2025	27	330.00
10	2025	28	815.00
11	2025	29	1400.00
12	2025	30	280.00

Use by: Finance & BI Teams



AnshLibrary



# 05

## Customer Order Gaps View

```
CREATE VIEW vw_CustomerOrderGap AS
SELECT
```

```
o.CustomerID,
o.OrderID,
```

```
CONCAT(c.First_Name, ' ', c.Last_Name) AS CustomerName,
o.OrderDate,
```

```
LAG(o.OrderDate) OVER(PARTITION BY o.CustomerID ORDER BY o.OrderDate) AS
PreviousOrder,
```

```
DATEDIFF(DAY, LAG(o.OrderDate) OVER(PARTITION BY o.CustomerID ORDER BY
o.OrderDate), OrderDate) AS GapDays
```

```
FROM Orders o
JOIN Customers c
ON o.CustomerID = c.Customer_id
```

```
Select TOP 10 * from
vw_CustomerOrderGap
```

	CustomerID	OrderID	CustomerName	OrderDate	PreviousOrder	GapDays
1	1	3	Jossef Goldberg	2025-01-10	NULL	NULL
2	1	4	Jossef Goldberg	2025-01-20	2025-01-10	10
3	1	7	Jossef Goldberg	2025-02-15	2025-01-20	26
4	1	19	Jossef Goldberg	2025-07-09	2025-02-15	144
5	1	20	Jossef Goldberg	2025-07-10	2025-07-09	1
6	1	27	Jossef Goldberg	2025-07-17	2025-07-10	7
7	2	1	Kevin Brown	2025-01-01	NULL	NULL
8	2	5	Kevin Brown	2025-02-01	2025-01-01	31
9	2	9	Kevin Brown	2025-03-10	2025-02-01	37
10	2	11	Kevin Brown	2025-07-01	2025-03-10	113

```
Select * from vw_CustomerOrderGap
Where CustomerName = 'Mary'
```

	CustomerID	OrderID	CustomerName	OrderDate	PreviousOrder	GapDays
1	3	2	Mary	2025-01-05	NULL	NULL
2	3	6	Mary	2025-02-05	2025-01-05	31
3	3	10	Mary	2025-03-15	2025-02-05	38
4	3	13	Mary	2025-07-03	2025-03-15	110
5	3	15	Mary	2025-07-05	2025-07-03	2
6	3	23	Mary	2025-07-13	2025-07-05	8
7	3	29	Mary	2025-07-19	2025-07-13	6

Use by: Churn Prediction Teams



AnshLibrary



# 06

## High-Value Orders View

```
CREATE VIEW vw_HighValueOrders AS
SELECT * FROM Orders
WHERE Sales >= 100;
```

```
Select * from vw_HighValueOrders
```

	OrderID	ProductID	CustomerID	SalesPersonID	OrderDate	ShipDate	OrderStatus	ShipAddress	BillAddress	Quantity	Sales	CreationTime
1	17	106	5	2	2025-07-07	2025-07-11	Dispatched	7282 Rain Tree Ln	3082 Sunshine Blvd	10	110.00	2025-07-07 17:50:45.0000000
2	18	105	4	1	2025-07-08	2025-07-12	Unconfirmed	1223 Ash Way	1811 Winter Oak Rd	11	121.00	2025-07-08 18:00:55.0000000
3	19	105	1	1	2025-07-09	2025-07-13	Awaiting Payment	5312 Laurel Ridge	4447 Warm Springs	12	132.00	2025-07-09 19:10:00.0000000
4	20	101	1	1	2025-07-10	2025-07-14	Refunded	6820 Moonlight Rd	8400 Crystal Ln	13	143.00	2025-07-10 20:20:20.0000000
5	22	106	2	3	2025-07-12	2025-07-16	Shipped	3333 Violet Blvd	6777 Oak Hollow Dr	3	120.00	2025-07-12 11:20:30.0000000
6	23	104	3	4	2025-07-13	2025-07-17	Delivered	200 Lake Shore Dr	9012 Elm Heights	4	140.00	2025-07-13 12:30:40.0000000
7	24	107	5	4	2025-07-14	2025-07-18	Shipped	1111 Breeze Dr	3000 Hill Valley Rd	5	160.00	2025-07-14 13:40:50.0000000
8	25	107	6	2	2025-07-15	2025-07-19	Delivered	5000 West Palm Ln	1044 Sunny Dr	6	180.00	2025-07-15 14:51:55.0000000
9	26	102	4	2	2025-07-16	2025-07-20	Dispatched	8778 Lavender Loop	3339 Dusty Trail	7	200.00	2025-07-16 15:55:05.0000000
10	27	101	1	3	2025-07-17	2025-07-21	On Hold	6464 Crystal River	7779 Old Hollow Dr	8	220.00	2025-07-17 16:05:15.0000000
11	28	103	4	2	2025-07-18	2025-07-22	Packed	3922 Amber Crest	1100 Jade Hill Blvd	9	240.00	2025-07-18 17:15:25.0000000
12	29	104	3	5	2025-07-19	2025-07-23	Cancelled	2330 Stonegate Way	NULL	10	260.00	2025-07-19 18:25:35.0000000
13	30	105	9	4	2025-07-20	2025-07-24	Processing	NULL	5599 Ridgeview Ln	11	280.00	2025-07-20 19:35:45.0000000

Use by: Fraud Detection / Finance



AnshLibrary



Employee Productivity View

```
CREATE VIEW vw_EmployeeProductivity AS
SELECT
    e.Employee_id,
    CONCAT(e.FirstName, ' ', e.LastName) AS EmployeeName,
    COUNT(o.OrderID) AS OrdersHandled,
    SUM(o.Sales) AS TotalSales
FROM Employees e
JOIN Orders o ON e.Employee_id = o.SalesPersonID
GROUP BY e.Employee_id, e.FirstName, e.LastName;
```

=====

Select \* from vw\_EmployeeProductivity

	Employee_id	EmployeeName	OrdersHandled	TotalSales
1	1	Frank Lee	4	426.00
2	2	Kevin Brown	7	919.00
3	3	Mary	7	535.00
4	4	Michael Ray	5	767.00
5	5	Carol Baker	7	558.00

Use by: HR / Team Managers





# 08

## Refund , Return, and Cancelled Analysis View

**CREATE VIEW vw\_ReturnRefundStats AS  
SELECT**

**OrderID,  
CustomerID,  
OrderStatus,  
Sales,  
OrderDate**

**FROM Orders**

**WHERE OrderStatus IN ('Refunded', 'Returned', Cancelled);**

=====

**Select \* from vw\_ReturnRefundStats**

	OrderID	CustomerID	OrderStatus	Sales	OrderDate
1	11	2	Returned	44.00	2025-07-01
2	20	1	Refunded	143.00	2025-07-10
3	29	3	Cancelled	260.00	2025-07-19

Use by: Customer Support / Audit



**AnshLibrary**



Archived Order History View

CREATE VIEW vw\_CombinedOrders AS  
SELECT \* FROM Orders  
UNION ALL  
SELECT \* FROM OrdersArchive;

Select \* from  
vw\_CombinedOrders  
WHERE Sales > 120

Select \* from Orders  
WHERE OrderStatus  
IN ( 'Delivered', 'Shipped', 'Packed' )  
Order By OrderStatus

	OrderID	ProductID	CustomerID	SalesPersonID	OrderDate	ShipDate	OrderStatus	ShipAddress	BillAddress	Quantity	Sales	CreationTime
1	18	105	4	1	2025-07-08	2025-07-12	Unconfirmed	1223 Ash Way	1811 Winter Oak Rd	11	121.00	2025-07-08 18:00:55.0000000
2	19	105	1	1	2025-07-09	2025-07-13	Awaiting Payment	5312 Laurel Ridge	4447 Warm Springs	12	132.00	2025-07-09 19:10:00.0000000
3	20	101	1	1	2025-07-10	2025-07-14	Refunded	6820 Moonlight Rd	8400 Crystal Ln	13	143.00	2025-07-10 20:20:00.0000000
4	23	104	3	4	2025-07-13	2025-07-17	Delivered	200 Lake Shore Dr	9012 Elm Heights	4	140.00	2025-07-13 12:30:40.0000000
5	24	107	5	4	2025-07-14	2025-07-18	Shipped	1111 Breeze Dr	3000 Hill Valley Rd	5	160.00	2025-07-14 13:40:50.0000000
6	25	107	6	2	2025-07-15	2025-07-19	Delivered	5000 West Palm Ln	1044 Sunny Dr	6	180.00	2025-07-15 14:51:55.0000000
7	26	102	4	2	2025-07-16	2025-07-20	Dispatched	8778 Lavender Loop	3339 Dusty Trail	7	200.00	2025-07-16 15:55:05.0000000
8	27	101	1	3	2025-07-17	2025-07-21	On Hold	6464 Crystal River	7779 Old Hollow Dr	8	220.00	2025-07-17 16:05:15.0000000
9	28	103	4	2	2025-07-18	2025-07-22	Packed	3922 Amber Crest	1100 Jade Hill Blvd	9	240.00	2025-07-18 17:15:25.0000000
10	29	104	3	5	2025-07-19	2025-07-23	Cancelled	2330 Stonegate Way	NULL	10	260.00	2025-07-19 18:25:35.0000000
11	30	105	9	4	2025-07-20	2025-07-24	Processing	NULL	5599 Ridgeview Ln	11	280.00	2025-07-20 19:35:45.0000000
12	14	101	8	3	2024-07-04	NULL	Pending	43 Rose St	NULL	2	150.00	2024-07-04 10:40:19.0000000

	OrderID	ProductID	CustomerID	SalesPersonID	OrderDate	ShipDate	OrderStatus	ShipAddress	BillAddress	Quantity	Sales	CreationTime
1	1	101	2	3	2025-01-01	2025-01-05	Delivered	9833 Mt. Dias Blv.	1226 Shoe St.	1	10.00	2025-01-01 12:34:56.0000000
2	3	101	1	5	2025-01-10	2025-01-25	Delivered	8157 W. Book	8157 W. Book	2	20.00	2025-01-10 18:24:08.0000000
3	5	104	2	5	2025-02-01	2025-02-05	Delivered	NULL	NULL	1	25.00	2025-02-01 14:02:41.0000000
4	6	104	3	5	2025-02-05	2025-02-10	Delivered	1792 Belmont Rd.	NULL	2	50.00	2025-02-06 15:34:57.0000000
5	7	102	1	1	2025-02-15	2025-02-27	Delivered	136 Balboa Court	NULL	2	30.00	2025-02-16 06:22:01.0000000
6	21	106	4	2	2025-07-11	2025-07-15	Delivered	7449 Green Leaf Ct.	1222 Northgate Ave	2	90.00	2025-07-11 10:10:10.0000000
7	23	104	3	4	2025-07-13	2025-07-17	Delivered	200 Lake Shore Dr	9012 Elm Heights	4	140.00	2025-07-13 12:30:40.0000000
8	25	107	6	2	2025-07-15	2025-07-19	Delivered	5000 West Palm Ln	1044 Sunny Dr	6	180.00	2025-07-15 14:51:55.0000000
9	28	103	4	2	2025-07-18	2025-07-22	Packed	3922 Amber Crest	1100 Jade Hill Blvd	9	240.00	2025-07-18 17:15:25.0000000
10	14	103	5	5	2025-07-04	2025-07-08	Packed	305 Mission Dr.	8321 Breeze Ave	7	77.00	2025-07-04 14:20:20.0000000
11	24	107	5	4	2025-07-14	2025-07-18	Shipped	1111 Breeze Dr	3000 Hill Valley Rd	5	160.00	2025-07-14 13:40:50.0000000
12	22	106	2	3	2025-07-12	2025-07-16	Shipped	3333 Violet Blvd	6777 Oak Hollow Dr	3	120.00	2025-07-12 11:20:30.0000000
13	8	101	4	3	2025-02-18	2025-02-27	Shipped	2947 Vine Lane	4311 Clay Rd	3	90.00	2025-02-18 10:45:22.0000000
14	9	101	2	3	2025-03-10	2025-03-15	Shipped	3768 Door Way	NULL	2	20.00	2025-03-10 12:59:04.0000000
15	10	102	3	5	2025-03-15	2025-03-20	Shipped	NULL	NULL	0	60.00	2025-03-16 23:25:15.0000000
16	4	105	1	3	2025-01-20	2025-01-25	Shipped	5724 Victory Lane	NULL	2	60.00	2025-01-20 05:50:33.0000000

Use by: Compliance / Audit / Legal





# 10

## Country-Wise Customer Performance View

**CREATE VIEW vw\_CountryWiseCustomerSales AS  
SELECT**

**c.Country,  
COUNT(DISTINCT c.Customer\_id) AS Customers,  
COUNT(o.OrderID) AS Orders,  
SUM(o.Sales) AS Revenue**

**FROM Customers c  
JOIN Orders o ON c.Customer\_id = o.CustomerID  
GROUP BY c.Country;**

**Select \* from vw\_CountryWiseCustomerSales**

	Country	Customers	Orders	Revenue
1	Canada	1	1	180.00
2	Germany	2	12	1445.00
3	Mexico	1	1	280.00
4	USA	3	16	1300.00

Use by: Regional Sales Teams



**AnshLibrary**



# 11

## Product Category Sales Summary View

```
CREATE VIEW vw_CategorySalesSummary AS
SELECT
    p.Category,
    COUNT(o.OrderID) AS OrdersCount,
    SUM(o.Sales) AS TotalSales
FROM Orders o
JOIN Products p ON o.ProductID = p.ProductID
GROUP BY p.Category;
```

**Select \* from vw\_CategorySalesSummary**

Results		Messages	
	Category	OrdersCount	TotalSales
1	Accessories	18	1633.00
2	Clothing	12	1572.00

Use by: Category Managers / Inventory Planners



AnshLibrary



# 12

## Orders With Missing Billing or Shipping Info View

**CREATE VIEW vw\_IncompleteOrders AS  
SELECT \* FROM Orders  
WHERE ShipAddress IS NULL OR BillAddress IS NULL;**

**Select \* from vw\_IncompleteOrders**

	OrderID	ProductID	CustomerID	SalesPersonID	OrderDate	ShipDate	OrderStatus	ShipAddress	BillAddress	Quantity	Sales	CreationTime
1	2	102	3	3	2025-01-05	2025-01-10	Shipped	250 Race Court	NULL	1	15.00	2025-01-05 23:22:04.0000000
2	4	105	1	3	2025-01-20	2025-01-25	Shipped	5724 Victory Lane	NULL	2	60.00	2025-01-20 05:50:33.0000000
3	5	104	2	5	2025-02-01	2025-02-05	Delivered	NULL	NULL	1	25.00	2025-02-01 14:02:41.0000000
4	6	104	3	5	2025-02-05	2025-02-10	Delivered	1792 Belmont Rd.	NULL	2	50.00	2025-02-06 15:34:57.0000000
5	7	102	1	1	2025-02-15	2025-02-27	Delivered	136 Balboa Court	NULL	2	30.00	2025-02-16 06:22:01.0000000
6	9	101	2	3	2025-03-10	2025-03-15	Shipped	3768 Door Way	NULL	2	20.00	2025-03-10 12:59:04.0000000
7	10	102	3	5	2025-03-15	2025-03-20	Shipped	NULL	NULL	0	60.00	2025-03-16 23:25:15.0000000
8	29	104	3	5	2025-07-19	2025-07-23	Cancelled	2330 Stonegate Way	NULL	10	260.00	2025-07-19 18:25:35.0000000
9	30	105	9	4	2025-07-20	2025-07-24	Processing	NULL	5599 Ridgeview Ln	11	280.00	2025-07-20 19:35:45.0000000

Use by: Data Quality / Ops



AnshLibrary