MYSQL ASSIGNMENT 4

SaleID	ProductID	CustomerID	SaleDate	Quantity	UnitPrice	Region
1	101	1001	2024-01-05	5	200	North
2	102	1002	2024-01-10	10	150	East
3	103	1003	2024-02-15	2	300	North
4	104	1001	2024-02-20	7	250	West
5	101	1004	2024-03-05	1	200	East

1. Write a query to calculate the total sales (Quantity * UnitPrice) for each product.

select productID,sum(quantity*unitprice) as total_sales from sales group by productID;
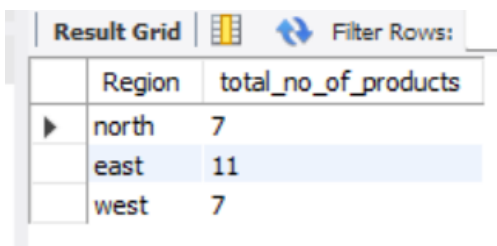
productID	total_sales
101	1200
102	1500
103	600
104	1750

2.Write a query to find the total number of products sold in each region.

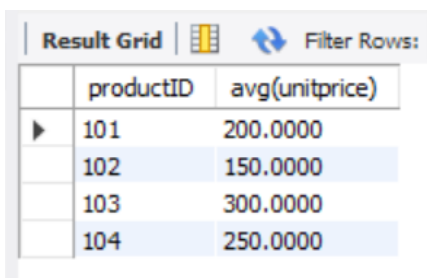**select Region,sum(Quantity) as total_no_of_products from sales group by region;**

Region	total_no_of_products
north	7
east	11
west	7

3.Write a query to get the average sales amount per product.

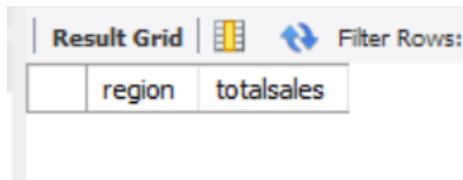**select productID,avg(unitprice) from sales group by productID;**

productID	avg(unitprice)
101	200.0000
102	150.0000
103	300.0000
104	250.0000

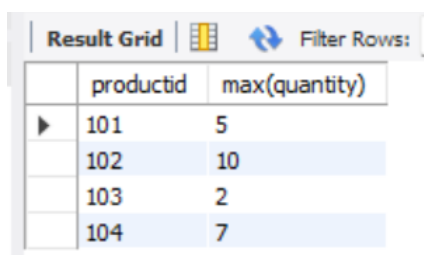4. Find the regions where total sales are more than 3000.

select region,sum(quantity*unitprice) as totalsales from sales group by region having sum(quantity*unitprice)>3000;

region	totalsales

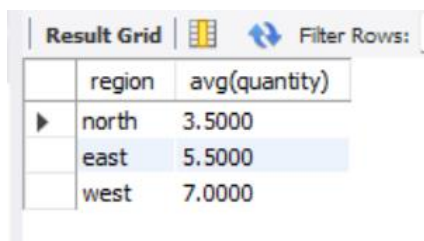5. Write a query to get the maximum quantity sold for each product.

select productid,max(quantity) from sales group by productid;

productid	max(quantity)
101	5
102	10
103	2
104	7

6. Write a query to calculate the average quantity of products sold per region.
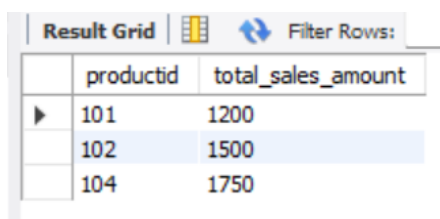
select region,avg(quantity) from sales group by region;

region	avg(quantity)
north	3.5000
east	5.5000
west	7.0000

7. Find the product IDs that have generated a total sales amount of more than 1000.

select productid,sum(quantity*unitprice) as total_sales_amount from sales group by productid having sum(quantity*unitprice)>1000;

productid	total_sales_amount
101	1200
102	1500
104	1750

8. Write a query to get the total number of sales (rows) made for each customer.

select customerid,count(quantity*unitprice)as total_no_of_sales from sales group by customerid;

customerid	total_no_of_sales
1001	2
1002	1
1003	1
1004	1

9. Find the products for which the average quantity sold is less than 5.

select productid,avg(quantity) as average_quantity_sold from sales group by productid having avg(quantity)<5;

productid	average_quantity_sold
101	3.0000
103	2.0000

10. Write a query to find the sum of total sales for each customer in each region.

select customerid,region,sum(quantity*unitprice) as total_sales from sales group by customerid,region;

customerid	region	total_sales
1001	north	1000
1002	east	1500
1003	north	600
1001	west	1750
1004	east	200

11. Write a query to calculate the total sales for each month.

select month(saledate) as salemonth,sum(quantity*unitprice) as totalsales from sales group by salemonth;

salemonth	totalsales
1	2500
2	2350
3	200

12. Find the regions where the average unit price is more than 200.

select region, avg(unitprice) as average_unit_price from sales group by region having avg(unitprice)>200;

region	average_unit_price
north	250.0000
west	250.0000

13. Write a query to get the minimum and maximum quantity sold per region.

select region , max(quantity) as max_quantity_sold, min(quantity)as min_quantity_sold from sales group by region;

region	max_quantity_sold	min_quantity_sold
north	5	2
east	10	1
west	7	7

14. Find the customers who have made more than 2 purchases.

select customerid,count(quantity) as purchases from sales group by customerid having count(quantity)>2;

customerid	purchases

15. Write a query to find the total sales for each product and filter only those products where the total sales exceed 1500.

select productid,sum(quantity*unitprice) as total_sales from sales group by productid having sum(quantity*unitprice)>1500;

productid	total_sales
104	1750