

Q1. 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

Q2. Write a query to find the total number of products sold in each region.

**SELECT Region, count(ProductID) as "total number of products sold" from Sales
GROUP BY Region;**

	REGION	total number of products sold
▶	North	2
	East	2
	West	1

Q3. Write a query to get the average sales amount per product.

**SELECT ProductID, avg(Quantity * UnitPrice) as "average sales amount" from Sales
GROUP BY ProductID;**

	ProductID	average sales amount
▶	101	600.0000
	102	1500.0000
	103	600.0000
	104	1750.0000

Q4. Find the regions where total sales are more than 3000.

```
SELECT Region, sum(Quantity * UnitPrice) as "total sales" from Sales
GROUP BY Region
HAVING sum(Quantity * UnitPrice) > 3000;
```

	Region	total sales
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output showing nothing because total sales of all region is less than 3000

Q5. Write a query to get the maximum quantity sold for each product.

```
SELECT ProductID, max(quantity) as "maximum quantity sold" from Sales
GROUP BY ProductID;
```

	ProductID	maximum quantity sold
▶	101	5
	102	10
	103	2
	104	7

Q6. Write a query to calculate the average quantity of products sold per region.

```
SELECT Region, avg(quantity) as "average quantity of products sold" from Sales
GROUP BY Region;
```

	Region	average quantity of products sold
▶	North	3.5000
	East	5.5000
	West	7.0000

Q7. Find the product IDs that have generated a total sales amount of more than 1000.

SELECT ProductID, sum(quantity * UnitPrice) as "total sales amount of more than 1000" from Sales

GROUP BY ProductID

HAVING sum(quantity * UnitPrice) > 1000;

	ProductID	total sales amount of more than 1000
▶	101	1200
	102	1500
	104	1750

Q8. Write a query to get the total number of sales (rows) made for each customer.

SELECT CustomerID, count(Quantity) as "total number of sales" from Sales

GROUP BY CustomerID;

	CustomerID	total number of sales
▶	1001	2
	1002	1
	1003	1
	1004	1

Q9. 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

Q10. 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

Q11. Write a query to calculate the total sales for each month.

**SELECT EXTRACT(MONTH FROM SaleDate) as month, sum(Quantity * UnitPrice) as "Total Sales" from Sales
GROUP BY EXTRACT(MONTH FROM SaleDate);**

	month	Total Sales
▶	1	2500
	2	2350
	3	200

Q12. 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

Q13. Write a query to get the minimum and maximum quantity sold per region.

SELECT Region, min(Quantity), max(Quantity) from Sales GROUP BY Region;

	Region	min(Quantity)	max(Quantity)
▶	North	2	5
	East	1	10
	West	7	7

/*Q14. Find the customers who have made more than 2 purchases.*/

**SELECT CustomerID, count(ProductID) from sales
group by CustomerID
having count(ProductID) > 1;**

	CustomerID	count(ProductID)
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Output is showing blank because maximum is a 2 purchase, not more than that

Q15. 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

