

## Requetes SQL projet Toys and Models

### Ventes

```
• SELECT concat(Year,' ',CASE WHEN Month <10 THEN CONCAT(0,Month)
    ELSE Month END ) AS Date,productline, Total
FROM (
    SELECT YEAR(orderDate) AS Year,MONTH(orderDate) AS Month,productLine, SUM(quantityOrdered) AS Total
    FROM products
    JOIN orderdetails
    ON products.productCode = orderdetails.productCode
    JOIN orders
    ON orderdetails.orderNumber = orders.orderNumber
    GROUP BY productLine,Year,Month
    ORDER BY Year, Month
) AS Try
;
```

```

SELECT productLine,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=1 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=1 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=1 then quantityOrdered END)) as JAN_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=2 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=2 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=2 then quantityOrdered END)) as FEV_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=3 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=3 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=3 then quantityOrdered END)) as MAR_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=4 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=4 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=4 then quantityOrdered END)) as AVR_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=5 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=5 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=5 then quantityOrdered END)) as MAI_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=6 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=6 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=6 then quantityOrdered END)) as JUIN_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=7 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=7 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=7 then quantityOrdered END)) as JUL_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=8 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=8 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=8 then quantityOrdered END)) as AOÛ_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=9 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=9 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=9 then quantityOrdered END)) as SEPT_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=10 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=10 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=10 then quantityOrdered END)) as OCT_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=11 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=11 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=11 then quantityOrdered END)) as NOV_22_23,
  ( (SUM(CASE when year(orderDate)=2023 and month(orderDate)=12 then quantityOrdered END) - SUM(CASE when year(orderDate)=2022 and month(orderDate)=12 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2022 and month(orderDate)=12 then quantityOrdered END)) as DEC_22_23,
  ( (SUM(CASE when year(orderDate)=2024 and month(orderDate)=1 then quantityOrdered END) - SUM(CASE when year(orderDate)=2023 and month(orderDate)=1 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2023 and month(orderDate)=1 then quantityOrdered END)) as JAN_23_24,
  ( (SUM(CASE when year(orderDate)=2024 and month(orderDate)=2 then quantityOrdered END)
  - SUM(CASE when year(orderDate)=2023 and month(orderDate)=2 then quantityOrdered END) )
  / SUM(CASE when year(orderDate)=2023 and month(orderDate)=2 then quantityOrdered END)) as FEV_23_24
FROM products
JOIN orderdetails
ON products.productCode = orderdetails.productCode
JOIN orders
ON orderdetails.orderNumber = orders.orderNumber
GROUP BY productLine
;

```

## Logistique

```
SELECT p.productName, SUM(od.quantityOrdered) AS totalOrdered, p.quantityInStock,  
SUM(CASE WHEN YEAR(orderDate)=2022 THEN quantityOrdered*priceEach END) AS CA_2022,  
SUM(CASE WHEN YEAR(orderDate)=2023 THEN quantityOrdered*priceEach END) AS CA_2023,  
SUM(CASE WHEN YEAR(orderDate)=2024 THEN quantityOrdered*priceEach END) AS CA_2024  
FROM products p  
JOIN orderdetails od  
ON p.productCode = od.productCode  
JOIN orders o  
ON od.orderNumber=o.orderNumber  
GROUP BY p.productName, p.quantityInStock  
ORDER BY totalOrdered  
DESC LIMIT 5;
```

## Finances

```
SELECT country,  
SUM(CASE WHEN YEAR(orderDate)=2024 AND MONTH(orderDate)=1 THEN quantityOrdered*priceEach END) AS Janvier_2024,  
SUM(CASE WHEN YEAR(orderDate)=2024 AND MONTH(orderDate)=2 THEN quantityOrdered*priceEach END) AS Fevrier_2024  
FROM orderdetails  
JOIN orders o  
ON orderdetails.orderNumber=o.orderNumber  
JOIN customers c  
ON c.customerNumber=o.customerNumber  
GROUP BY country  
;
```

```
select productName,country,sum(o.quantityOrdered) as nombre_produit,sum(o.quantityOrdered*priceEach) as Chiffre_A_P,Month(orderDate) as Mois, YEAR(orderDate) as Année  
from orderdetails o  
join products on o.productCode=products.productCode  
join orders on o.orderNumber=orders.orderNumber  
join customers on orders.customerNumber=customers.customerNumber  
WHERE orderDate BETWEEN '2024-01-01' AND '2024-02-20'  
GROUP BY productName,Month(orderDate), YEAR(orderDate),country,priceEach  
ORDER BY sum(o.quantityOrdered*priceEach) desc  
;
```

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```
SELECT o.orderNumber
FROM orderdetails o
LEFT JOIN orders
ON o.orderNumber=orders.orderNumber
LEFT JOIN customers c
ON orders.customerNumber=c.customerNumber
LEFT JOIN payments p
ON c.customerNumber=p.customerNumber
WHERE paymentDate IS NULL
;
```

```
SELECT o.orderNumber,productName,status,comments,amount,paymentDate
FROM products
LEFT JOIN orderdetails o
ON products.productCode=o.productCode
LEFT JOIN orders
ON o.orderNumber=orders.orderNumber
LEFT JOIN customers c
ON orders.customerNumber=c.customerNumber
LEFT JOIN payments p
ON c.customerNumber=p.customerNumber
WHERE status='On Hold'
;
```

## Ressources humaines

```
SELECT Date, Name_employee, CA, Ranking FROM (
    SELECT Date,
    Name_employee,
    RANK()OVER(PARTITION BY Date ORDER BY CA DESC) AS Ranking, CA
    FROM(
        SELECT CONCAT(YEAR(orderDate), ' ', CASE WHEN MONTH(orderDate) <10 THEN CONCAT(0, MONTH(orderDate))
            ELSE MONTH(orderDate) END
            ) AS Date,
        CONCAT(lastName, ' ', firstname) AS Name_employee,
        SUM(quantityOrdered*priceEach) AS CA
        FROM employees e
        JOIN customers c
        ON e.employeeNumber=c.salesRepEmployeeNumber
        JOIN orders o
        ON c.customerNumber=o.customerNumber
        JOIN orderdetails
        ON orderdetails.orderNumber=o.orderNumber
        GROUP BY Date, Name_employee
        ORDER BY Date, CA DESC
    ) AS x
) AS y

WHERE Ranking <3
;
```

```
SELECT Year, Month, Name_employee, CA
FROM (
    SELECT YEAR(orderDate) AS Year,
    MONTH(orderDate) AS Month,
    CONCAT(lastName, ' ', firstName) AS Name_employee,
    RANK()OVER(PARTITION BY YEAR(orderDate), MONTH(orderDate) ORDER BY SUM(quantityOrdered*priceEach) DESC) AS Ranking,
    SUM(quantityOrdered*priceEach) AS CA
    FROM employees e
    JOIN customers c
    ON e.employeeNumber=c.salesRepEmployeeNumber
    JOIN orders o
    ON c.customerNumber=o.customerNumber
    JOIN orderdetails
    ON orderdetails.orderNumber=o.orderNumber
    GROUP BY Year, Month, Name_employee
    ORDER BY Year, Month, CA DESC
) as x
WHERE Ranking <3;
```