/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Customer ID who ordered more in quantity\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select distinct customerid,

sum(quantity) over(partition by customerid) as "quantity" from sales\_transaction.sales\_transactions

limit 1;

Result-

|  |  |
| --- | --- |
| customerid | quantity |
| 1001 | 22 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Total Sales by Product Category \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select productCategory,

sum(totalamount) as totalsales from sales\_transaction.sales\_transactions group by productCategory order by 2 desc;

Result-

|  |  |
| --- | --- |
| productCategory | totalsales |
| Home Decor | 2010 |
| Fashion | 1050 |
| Electronics | 850 |
| Toys | 840 |
| Grocery | 300 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Which product has made the maximum sales\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select productCategory,

sum(totalamount) as totalsales from sales\_transaction.sales\_transactions

group by productCategory order by 2 desc

limit 1;

Result-

|  |  |
| --- | --- |
| productCategory | totalsales |
| Home Decor | 2010 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Which product has made the least sales\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select productCategory,

sum(totalamount) as totalsales from sales\_transaction.sales\_transactions

group by productCategory order by 2 asc

limit 1;

Result-

|  |  |
| --- | --- |
| productCategory | totalsales |
| Grocery | 300 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Customer ID with number of Transactions\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

SELECT distinct customerid,

count(transactionid) over(partition by customerid) as "No of Transaction"

from sales\_transaction.sales\_transactions ;

Result-

|  |  |
| --- | --- |
| customerid | No of Transaction |
| 1001 | 14 |
| 1002 | 9 |
| 1003 | 10 |
| 1004 | 8 |
| 1005 | 3 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Total discounts used by each customers\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select customerid,sum(DiscountApplied) as "total discounts" from sales\_transaction.sales\_transactions

group by customerid;

Result-

|  |  |
| --- | --- |
| customerid | total discounts |
| 1002 | 205 |
| 1004 | 185 |
| 1003 | 255 |
| 1001 | 205 |
| 1005 | 130 |

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Number of transactions made in particular day\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select distinct substr(TransactionDate,1,10) as Day ,

count(transactionid) as 'transaction count'

from sales\_transaction.sales\_transactions group by substr(TransactionDate,1,10) order by 2 desc;

Result-

|  |  |
| --- | --- |
| Day | transaction count |
| 02/08/2024 | 7 |
| 09/08/2024 | 7 |
| 01/08/2024 | 6 |
| 06/08/2024 | 6 |
| 07/08/2024 | 5 |
| 04/08/2024 | 4 |
| 03/08/2024 | 4 |
| 08/08/2024 | 3 |
| 05/08/2024 | 1 |
| 10/08/2024 | 1 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* pre-ordered product list ignored pending payment \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select distinct productcategory

from sales\_transaction.sales\_transactions where quantity =0 and paymentmethod <> 'nan';

Result-

|  |
| --- |
| productcategory |
| Electronics |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Total Trust Points Used by Each Customer \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select customerid,sum(trustpointsused) as "total trust points"

from sales\_transaction.sales\_transactions group by customerid;

Result-

|  |  |
| --- | --- |
| customerid | total trust points |
| 1002 | 260 |
| 1004 | 200 |
| 1003 | 480 |
| 1001 | 320 |
| 1005 | 80 |

/\*\*\*\*\*\*\*\*\*\*\*List the products that were returned (assume negative values in quantity) \*\*\*\*\*\*\*\*\*/

select distinct productcategory

from sales\_transaction.sales\_transactions where quantity <1

and quantity <> 0 /\*ignore quantity with 0 are considered as pre ordered products\*/ ;

Result-

|  |
| --- |
| productcategory |
| Home Decor |
| Electronics |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sales Contribution by Payment Method \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

SELECT

(case when paymentmethod <> 'nan' then paymentmethod else 'payment process pending' end) as payment\_method,

SUM(TotalAmount) AS TotalSales,

round((SUM(TotalAmount) / (SELECT SUM(TotalAmount) FROM sales\_transaction.sales\_transactions)) \* 100,2) AS SalesContribution

FROM sales\_transaction.sales\_transactions

GROUP BY (case when paymentmethod <> 'nan' then paymentmethod else 'payment process pending' end) ;

Result-

|  |  |  |
| --- | --- | --- |
| payment\_method | TotalSales | SalesContribution |
| Trust Points | 310 | 6.14 |
| Credit Card | 390 | 7.72 |
| payment process pending | 2080 | 41.19 |
| Cash | 2270 | 44.95 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Average Discount by Product Category \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

select productcategory, round(avg(discountapplied),2) as Average from sales\_transaction.sales\_transactions

group by productcategory order by 2 desc ;

Result-

|  |  |
| --- | --- |
| productcategory | Average |
| Home Decor | 29.38 |
| Fashion | 27 |
| Grocery | 20.71 |
| Toys | 20 |
| Electronics | 18.64 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*most used payments\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

with cte as(

select transactionid, CustomerID,TransactionDate ,ProductID ,ProductCategory ,Quantity ,PricePerUnit,TotalAmount,TrustPointsUsed, DiscountApplied ,

(case when paymentmethod <> 'nan' then paymentmethod else 'payment process pending' end) as payment\_method

from sales\_transaction.sales\_transactions)

select payment\_method,count(payment\_method) as "count of payment method" from cte where payment\_method not in ('payment process pending')

group by payment\_method order by 2 desc

limit 1;

Result-

|  |  |
| --- | --- |
| payment\_method | count of payment method |
| Cash | 14 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*customerid with most pending payments \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

with cte as(

select transactionid, CustomerID,TransactionDate ,ProductID ,ProductCategory ,Quantity ,PricePerUnit,

TotalAmount,TrustPointsUsed , DiscountApplied ,

(case when paymentmethod <> 'nan' then paymentmethod else 'payment process pending' end) as payment\_method

from sales\_transaction.sales\_transactions ),

cte1 as(

select CustomerID, count(payment\_method) as count,

dense\_rank() over(order by count(payment\_method)desc) as maxcount from cte

where payment\_method='payment process pending'

group by customerid )

select customerid from cte1 where maxcount=1;

Result-

|  |
| --- |
| customerid |
| 1003 |
| 1004 |

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*List the pending payment process \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

with cte as(

select transactionid, CustomerID,TransactionDate ,ProductID ,ProductCategory ,Quantity ,PricePerUnit,

TotalAmount,TrustPointsUsed , DiscountApplied ,

(case when paymentmethod <> 'nan' then paymentmethod else 'payment process pending' end) as payment\_method

from sales\_transaction.sales\_transactions)

select customerid,TransactionDate,payment\_method from cte where payment\_method='payment process pending';

Result-

|  |  |  |
| --- | --- | --- |
| CustomerID | TransactionDate | payment\_method |
| 1003 | 07/08/2024 17:00 | payment process pending |
| 1001 | 01/08/2024 13:00 | payment process pending |
| 1004 | 02/08/2024 23:00 | payment process pending |
| 1002 | 09/08/2024 15:00 | payment process pending |
| 1003 | 05/08/2024 14:00 | payment process pending |
| 1004 | 01/08/2024 23:00 | payment process pending |
| 1001 | 03/08/2024 22:00 | payment process pending |
| 1002 | 09/08/2024 23:00 | payment process pending |
| 1004 | 01/08/2024 04:00 | payment process pending |
| 1003 | 02/08/2024 03:00 | payment process pending |