

```
---      Common Table Expression
/* Step 1- Find the total sales per customer */ -- (Standalone CTE)
WITH cts_Total_Sales as (select customerid,sum(sales) as total_sales from sales.orders group by customerid)

/* STEP 2- Find the Last Order date for Each customer */ -- (Standalone CTE)
, CTE_Last_order as (select customerid,max(orderdate) as last_order from sales.orders group by customerid
)
/* Step 3- Rank Customers based on total sales per customer */ -- (Nested CTE)
,Cte_sales_ranking as(select customerid,rank() over(order by total_sales desc) as sales_ranking from
    cts_Total_Sales)

/* Step 4- Segment Customers based on their Total Sales */ -- (Nested CTE)
,Cte_customer_segments as (select customerid,total_sales,case when total_sales > 100 then 'High'
    when total_sales >80 then 'Medium'
    else 'Low' end as customer_segments
    from cts_Total_Sales)
select c.customerid,c.firstname,c.lastname,cts.total_sales,lo.last_order,csr.sales_ranking,ccs.customer_segments
from sales.Customers as c left join cts_Total_Sales as cts on cts.CustomerID=c.CustomerID
left join cte_last_order as LO on lo.customerid = c.CustomerID left join Cte_sales_ranking as csr on
    csr.customerid=c.customerid
left join Cte_customer_segments as ccs on ccs.customerid=c.customerid;
```