**SQL Query results**

1. Find top 10 highest generating products (by sales)

select top 10 product\_id, SUM(sale\_price \* quantity) as sales

from df\_orders

group by product\_id

order by sales desc;

A screenshot of a data

Description automatically generated

1. Find the top 5 highest selling products in each region

with cte as (

select region, product\_id, SUM(sale\_price \* quantity) as sales

from df\_orders

group by region, product\_id)

select \* from (

select \*

, ROW\_NUMBER() over(partition by region order by sales desc) as rn

from cte) A

where rn <= 5;

A table with numbers and letters

Description automatically generated

1. Find month over month growth comparison for 2022 and 2023 sales e.g.: Jan 2022 vs Jan 2023

with cte as(

select year(order\_date) as order\_year, MONTH(order\_date) as order\_month, SUM(sale\_price \* quantity) as sales

from df\_orders

group by year(order\_date), MONTH(order\_date)

--order by year(order\_date), MONTH(order\_date)

)

select order\_month

, sum(case when order\_year=2022 then sales else 0 end) as sales\_2022

, sum(case when order\_year=2023 then sales else 0 end) as sales\_2023

from cte

group by order\_month

order by order\_month;

A screenshot of a table

Description automatically generated

1. For each category which month had the highest sales

with cte as (

select category, FORMAT(order\_date, 'yyyyMM') as order\_year\_mth, SUM(sale\_price \* quantity) as sales

from df\_orders

group by category, FORMAT(order\_date, 'yyyyMM')

-- order by category, FORMAT(order\_date, 'yyyyMM')

)

select \* from (

select \*,

row\_number() over(partition by category order by sales desc) as rn

from cte

) a

where rn = 1;

A screenshot of a number

Description automatically generated

1. Which sub category had highest growth by profit in 2023 compare to 2022

with cte as(

select sub\_category, year(order\_date) as order\_year, SUM(sale\_price \* quantity) as sales

from df\_orders

group by sub\_category, year(order\_date)

--order by year(order\_date), MONTH(order\_date)

)

, cte2 as (

select sub\_category

, sum(case when order\_year=2022 then sales else 0 end) as sales\_2022

, sum(case when order\_year=2023 then sales else 0 end) as sales\_2023

from cte

group by sub\_category

)

select top 1 \*

, (sales\_2023 - sales\_2022) \*100 / sales\_2022 as growth

from cte2

order by (sales\_2023 - sales\_2022) \*100 / sales\_2022 desc;

A screenshot of a phone

Description automatically generated