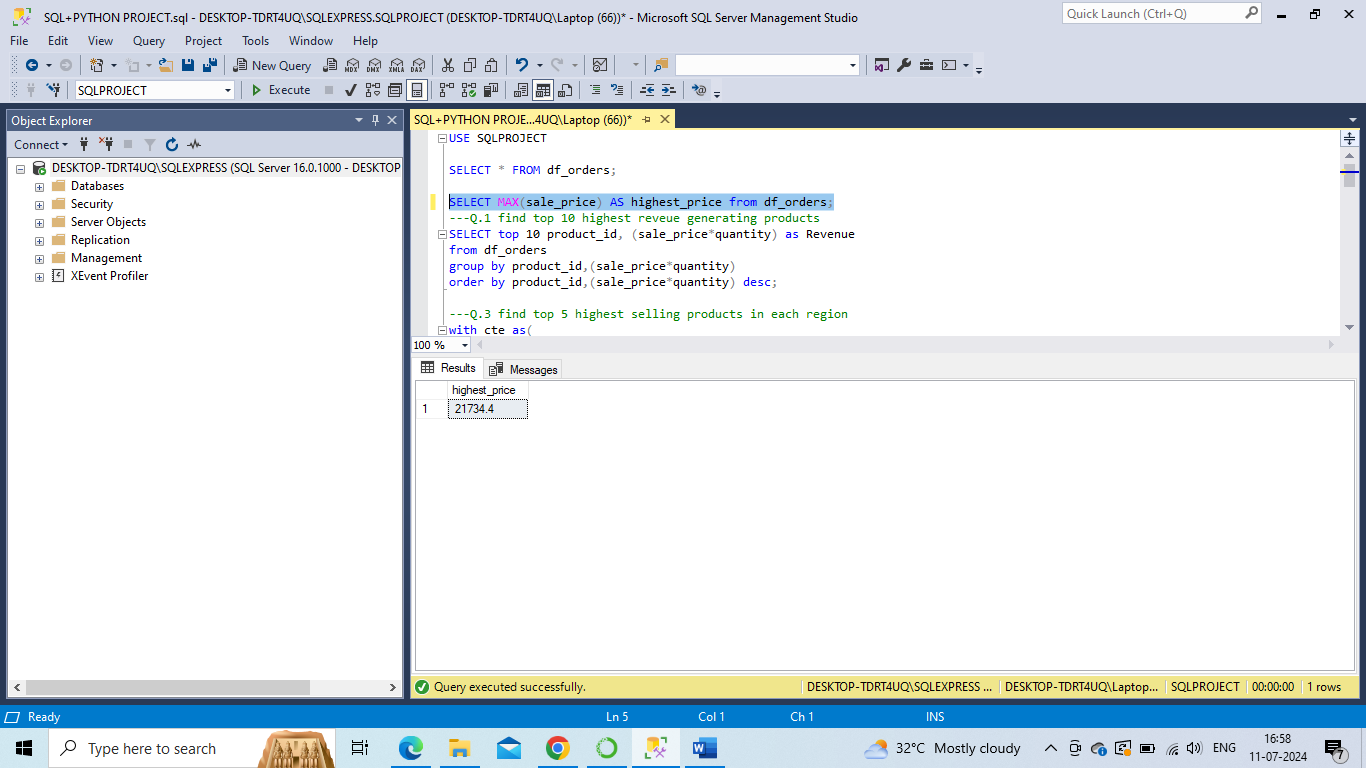
**SQL Queries and Answers**

**1 .To find max of sales price**

SELECT MAX(sale\_price) AS highest\_price from df\_orders;



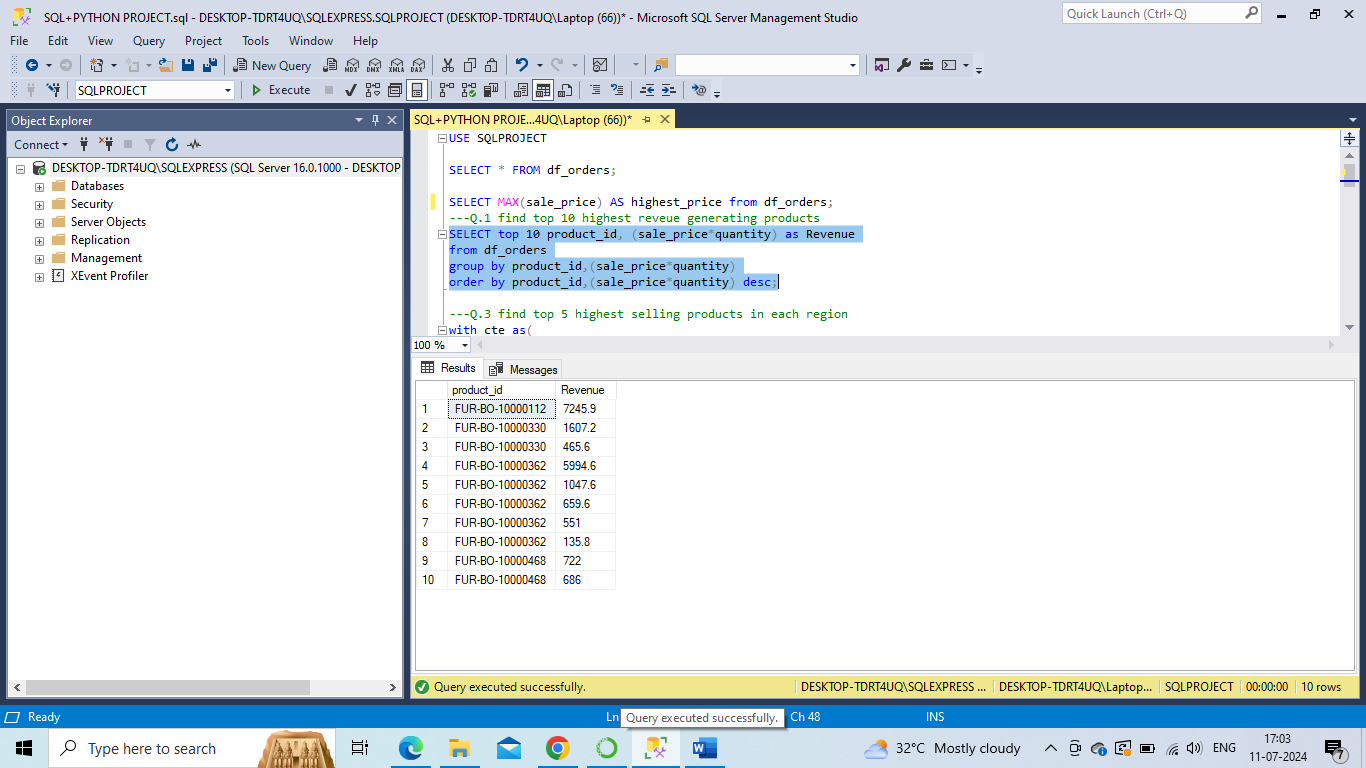
**2.** **find top 10 highest revenue generating products.**

SELECT top 10 product\_id, (sale\_price\*quantity) as Revenue

from df\_orders

group by product\_id,(sale\_price\*quantity)

order by product\_id,(sale\_price\*quantity) desc;



**3.** **find top 5 highest selling products in each region.**

with cte as(

SELECT region,product\_id,SUM(sale\_price) as Sale

from df\_orders

group by region,product\_id)

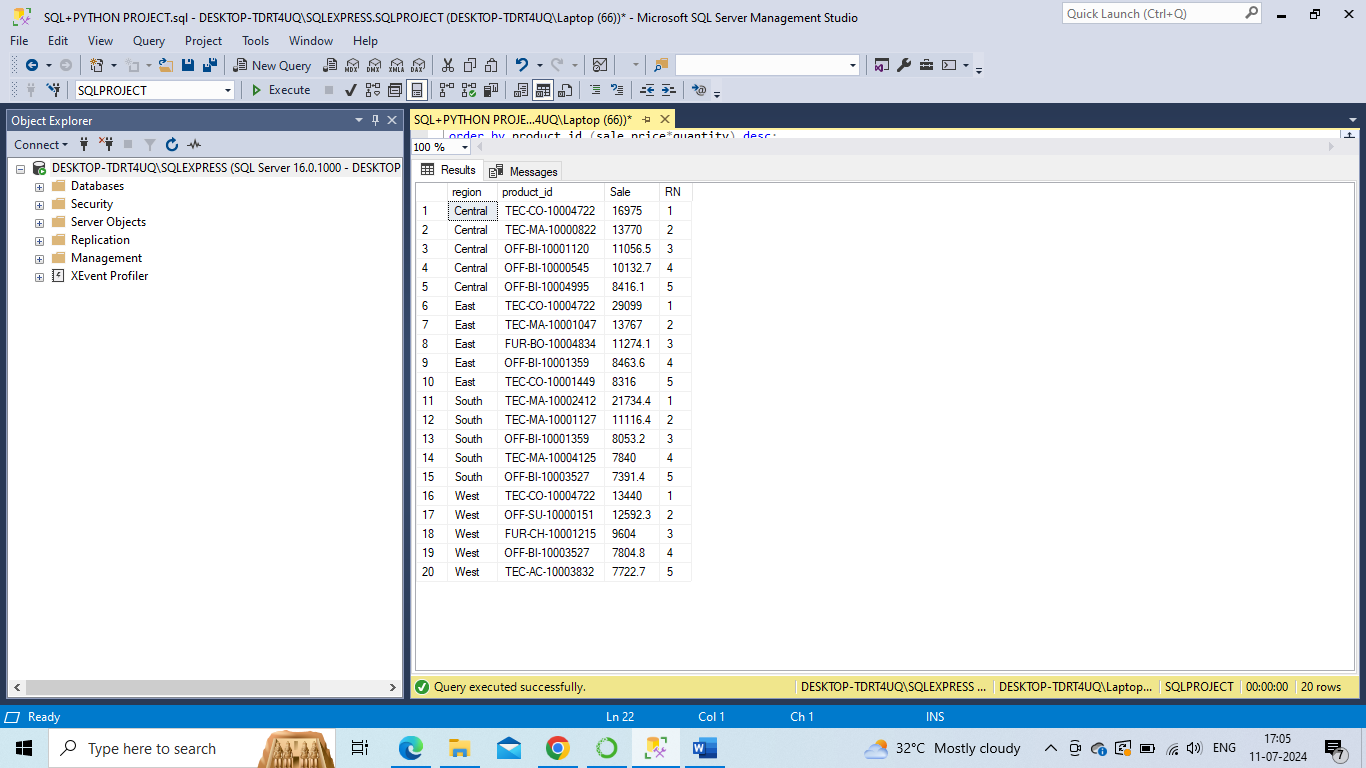
SELECT \* from (

SELECT \* ,

RANK()over(partition by region order by Sale desc) as RN

from cte) a

where RN <=5;



**4.** **find month over month growth comparison for 2022 and 2023 sales eg : jan 2022 vs jan 2023**

with cte as(

SELECT year(order\_date) as order\_year, month(order\_date) as order\_month,

SUM(sale\_price) as Sale

from df\_orders

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

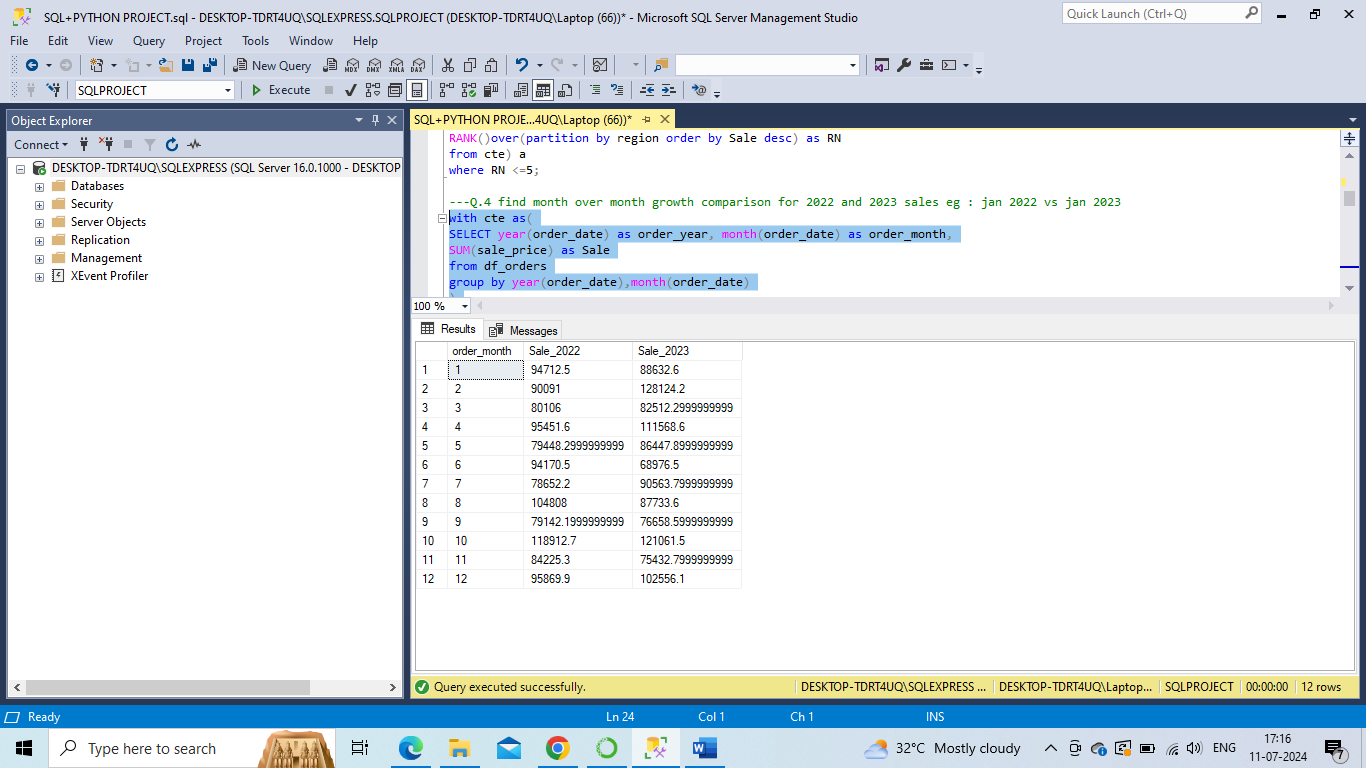
)

SELECT order\_month,

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

SUM(case when order\_year = 2023 then Sale else 0 end) as Sale\_2023

from cte Agroup by order\_month;



**5.** **for each category which month had highest sales**

with cte as(

SELECT category,format(order\_date,'yyyy-MM') as order\_month\_year,

SUM(sale\_price) as Sale

from df\_orders

group by category,format(order\_date,'yyyy-MM')

---order by order\_month\_year

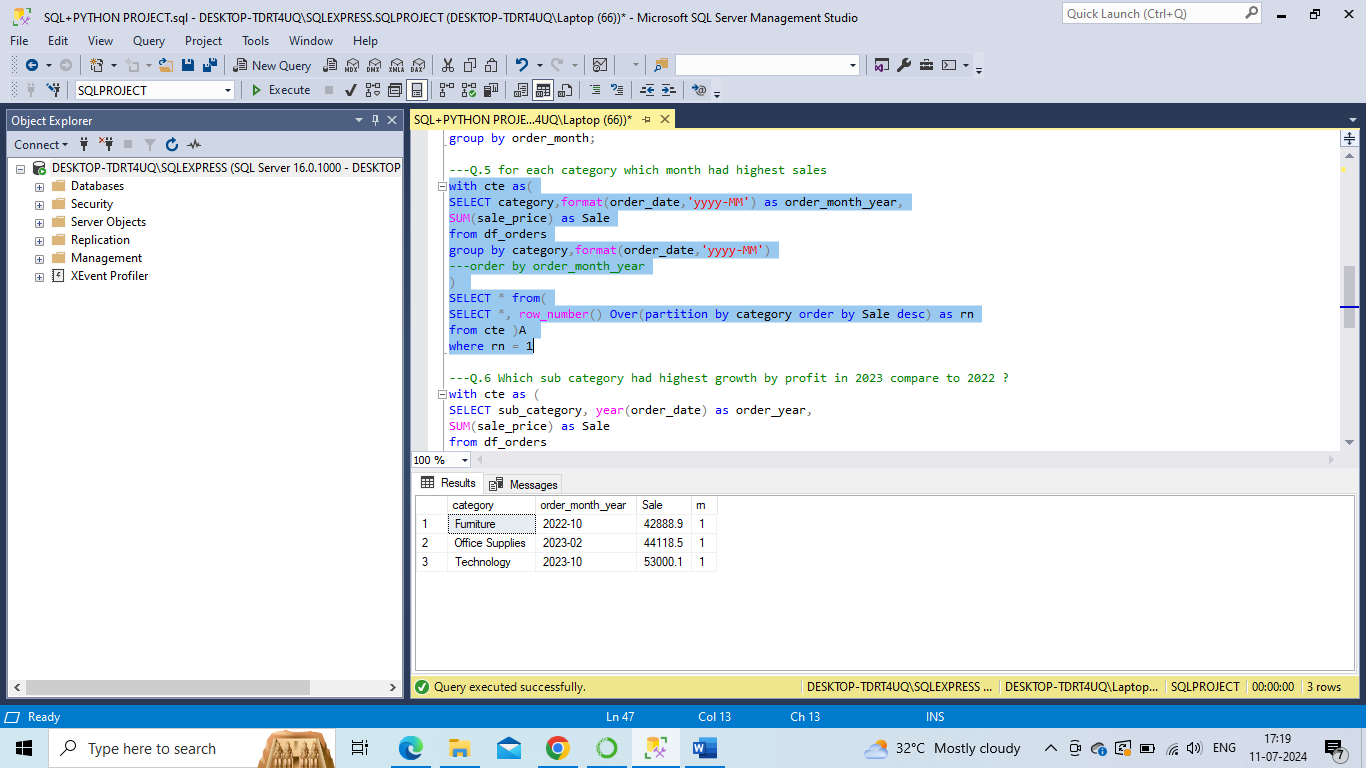
)

SELECT \* from(

SELECT \*, row\_number() Over(partition by category order by Sale desc) as rn

from cte )A

where rn = 1;



**6.** **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) as Sale

from df\_orders

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

)

,cte1 as

(

SELECT sub\_category,

SUM(case when order\_year = 2022 then Sale else 0 end) as Sales\_2022,

SUM(case when order\_year = 2023 then Sale else 0 end) as Sales\_2023

from cte

group by sub\_category

)

SELECT top 1 \*, (Sales\_2023 - Sales\_2022)

from cte1

order by (Sales\_2023 - Sales\_2022) desc;

