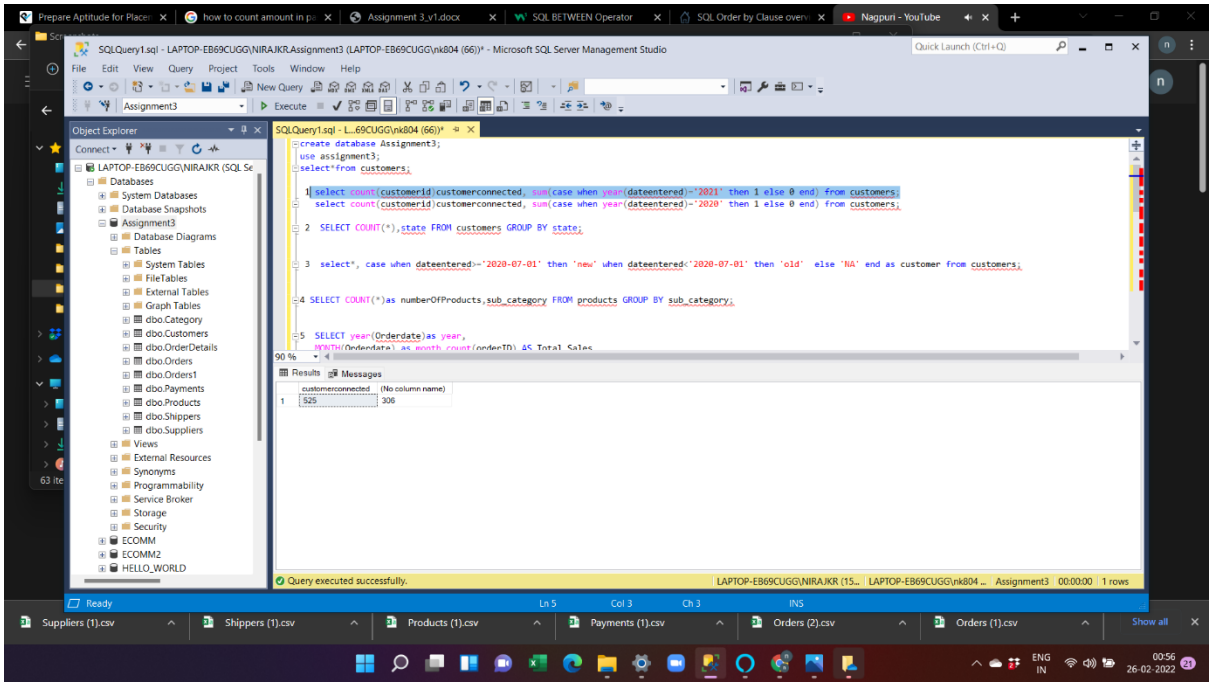
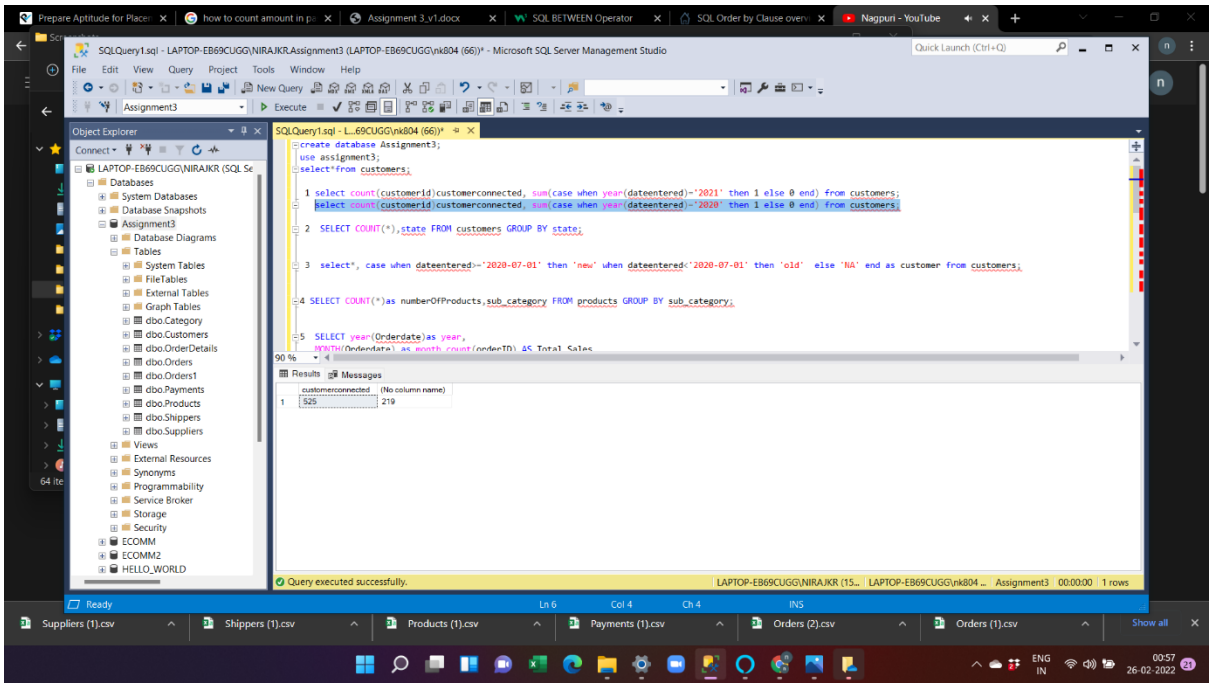
Q.NO.1 ANSWERS:

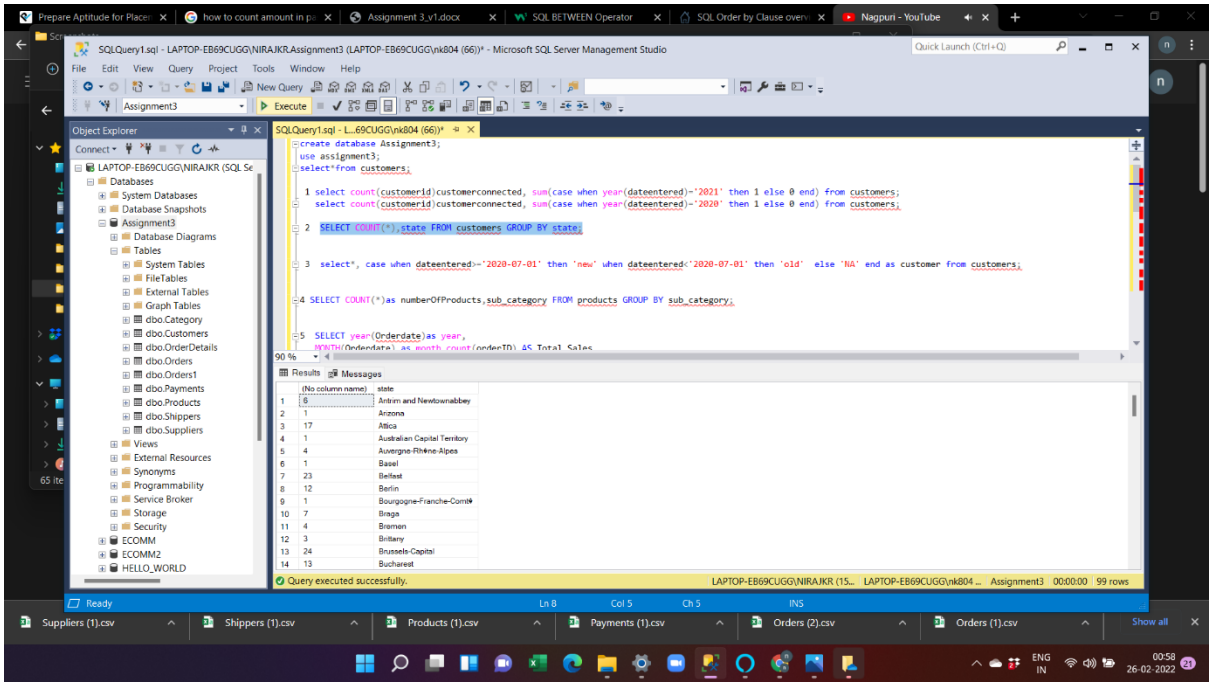
1.





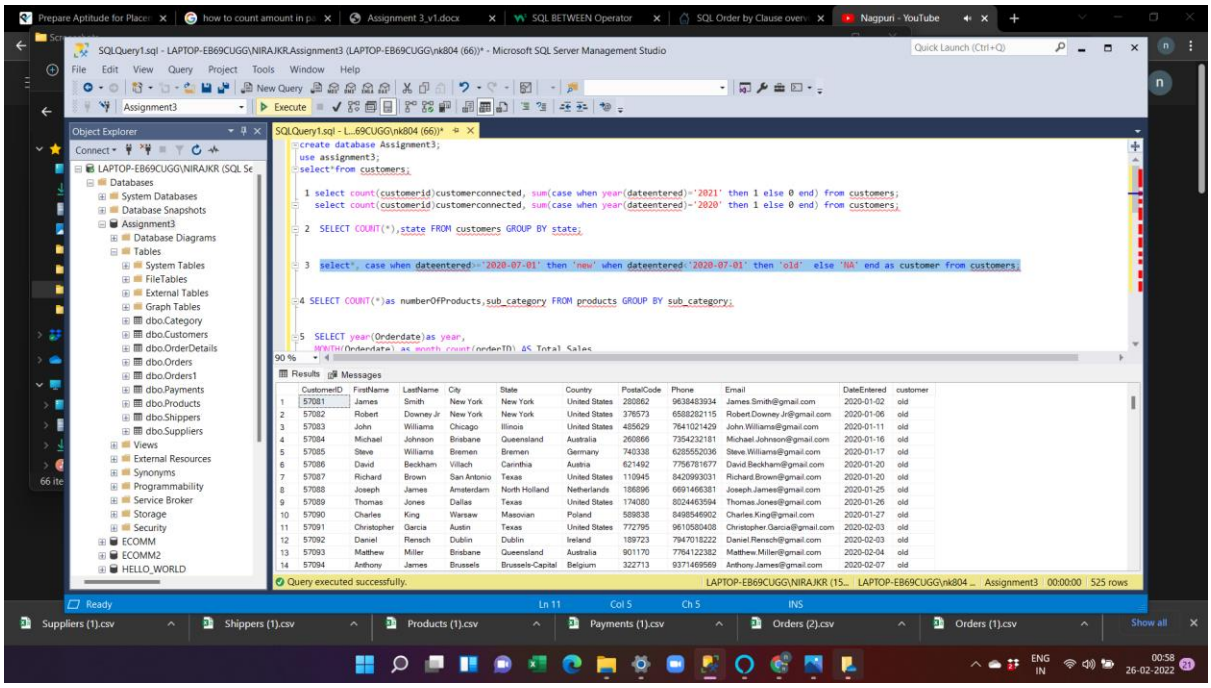
```
select count(customerid)customerconnected, sum(case when year(dateentered)='2021'
then 1 else 0 end) from customers;
select count(customerid)customerconnected, sum(case when year(dateentered)='2020'
then 1 else 0 end) from customers;
```

2.

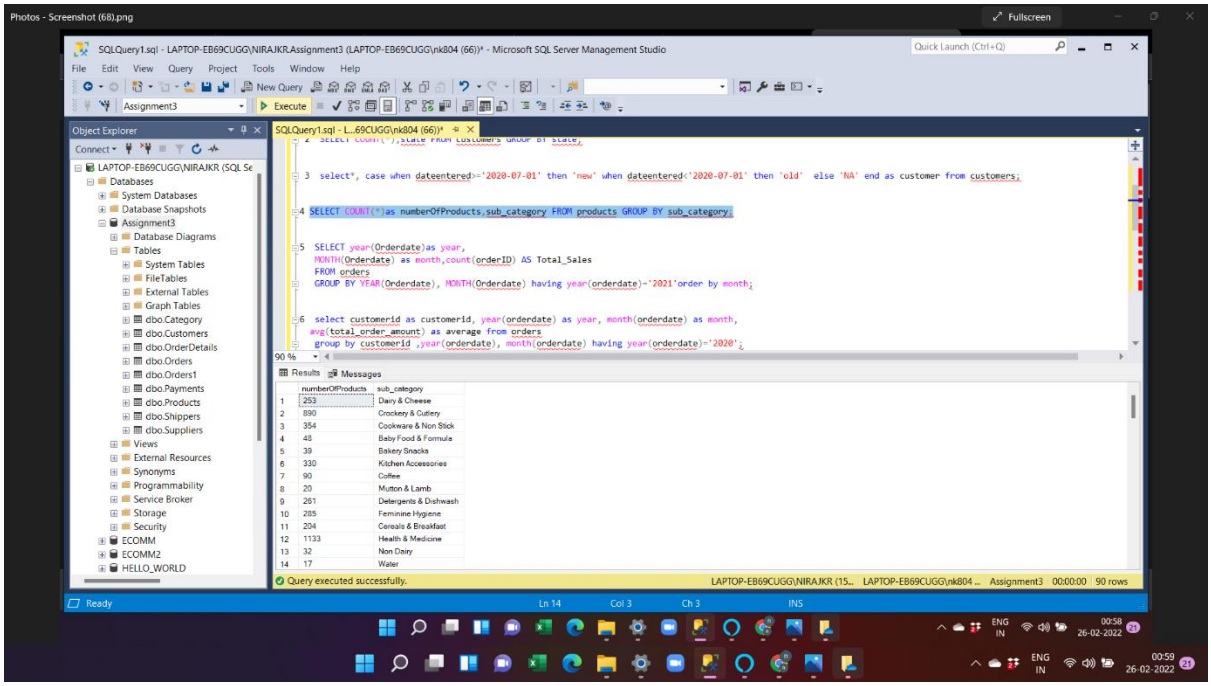


```
SELECT COUNT(*),state FROM customers GROUP BY state;
```

3.

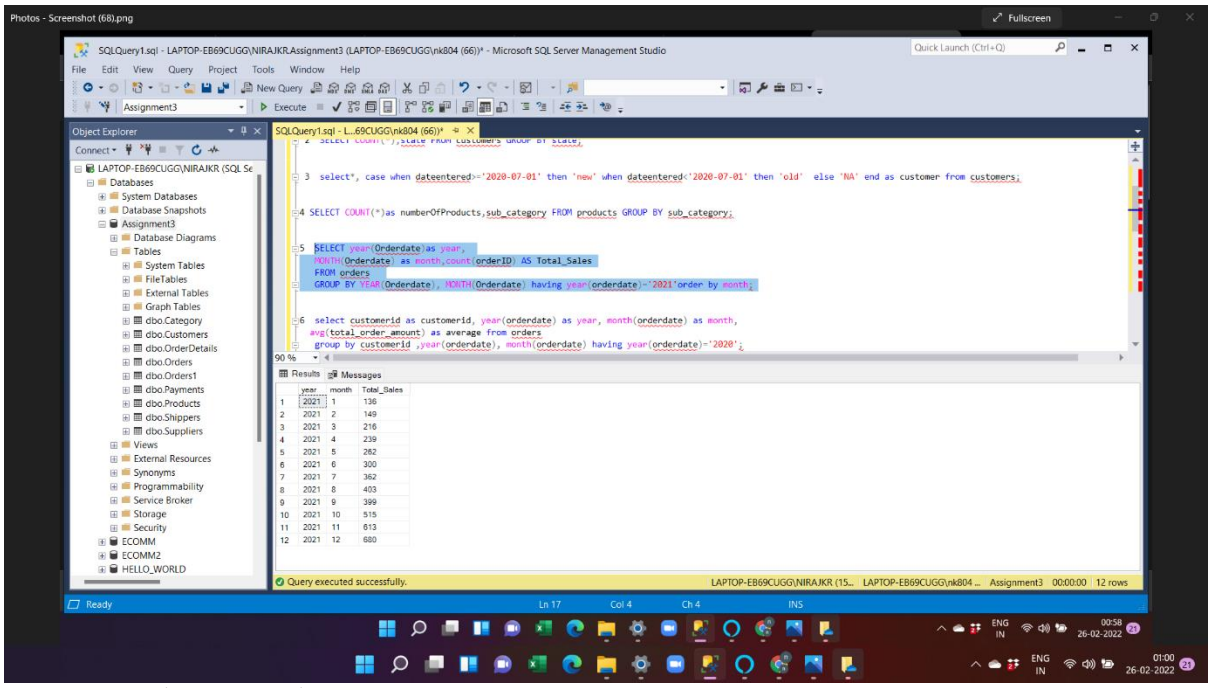


```
select*, case when dateentered>='2020-07-01' then 'new' when dateentered<'2020-07-01'
then 'old'  else 'NA' end as customer from customers;
```



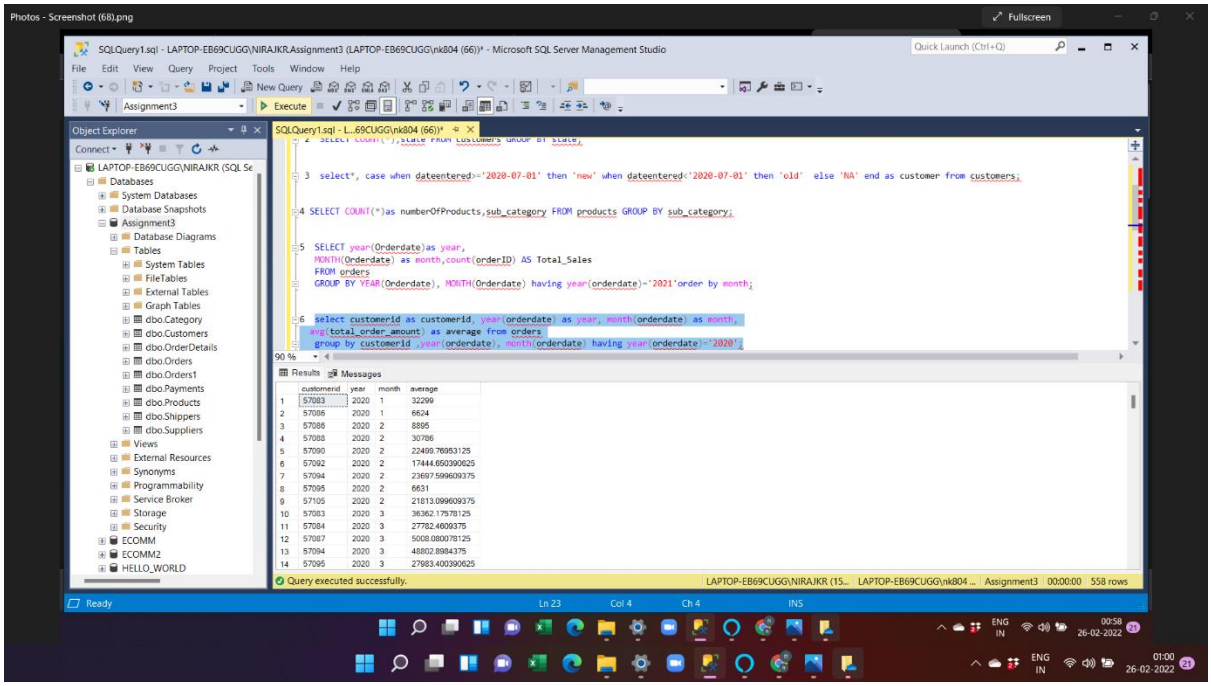
4. `SELECT COUNT(*)as numberOfProducts,sub_category FROM products GROUP BY sub_category;`

5.



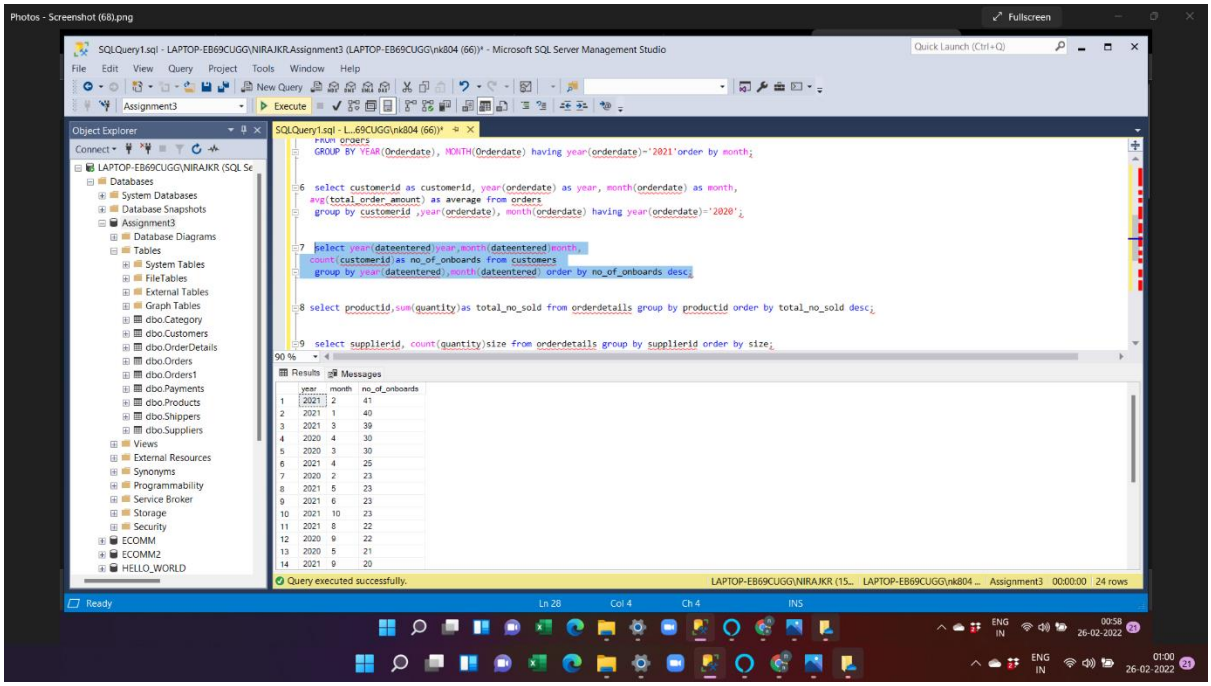

```
SELECT year(Orderdate)as year,
   MONTH(Orderdate) as month,count(orderID) AS Total_Sales
   FROM orders
   GROUP BY YEAR(Orderdate), MONTH(Orderdate) having year(orderdate)='2021'order by
month;
```

6.



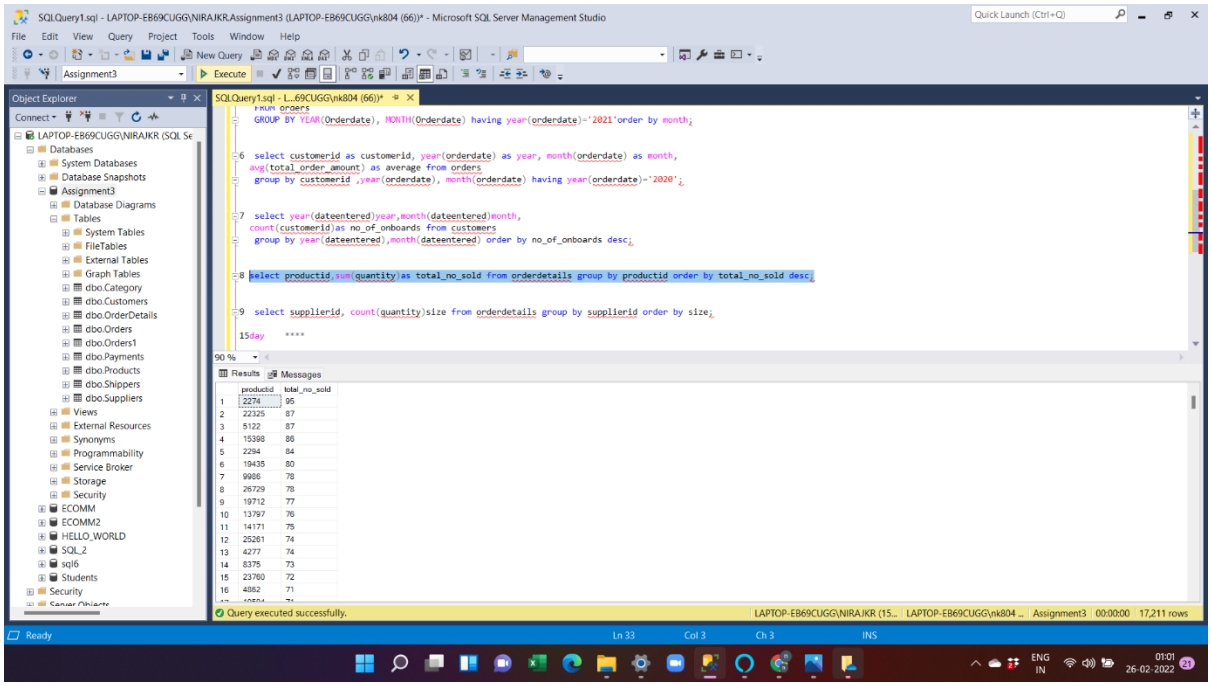

```
select customerid as customerid, year(orderdate) as year, month(orderdate) as month,
  avg(total_order_amount) as average from orders
   group by customerid ,year(orderdate), month(orderdate) having
year(orderdate)='2020';
```

7.



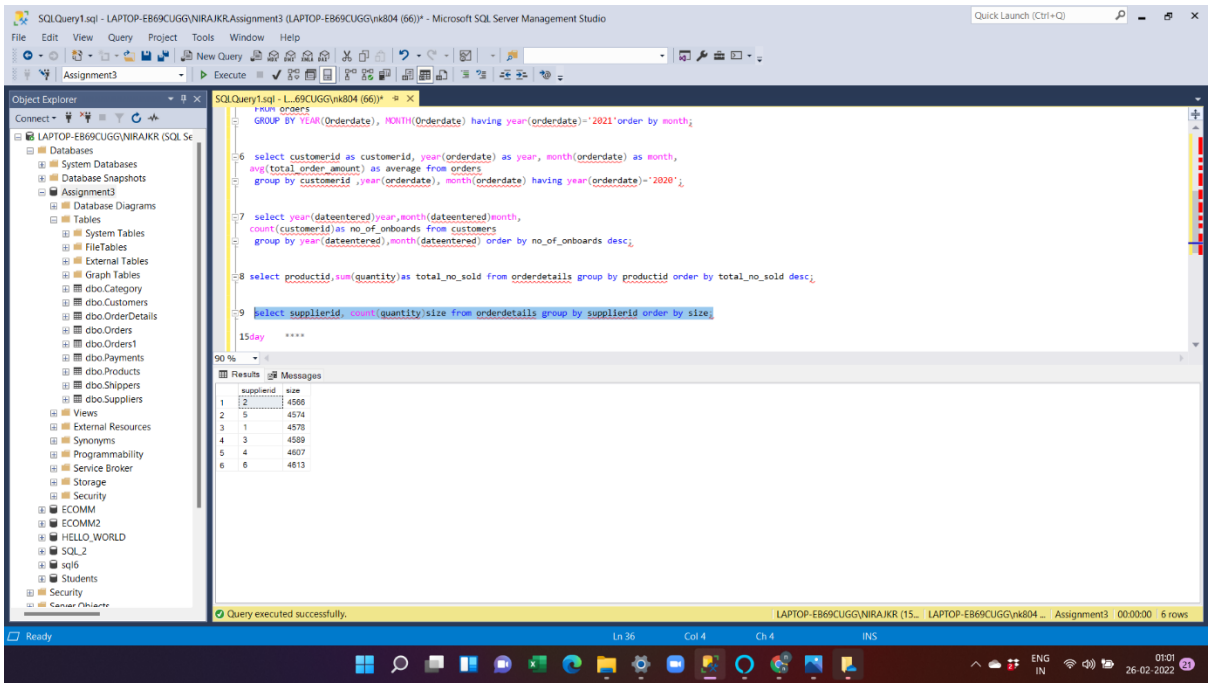

```
select year(dateentered)year,month(dateentered)month,
  count(customerid)as no_of_onboards from customers
   group by year(dateentered),month(dateentered) order by no_of_onboards desc;
```

8.



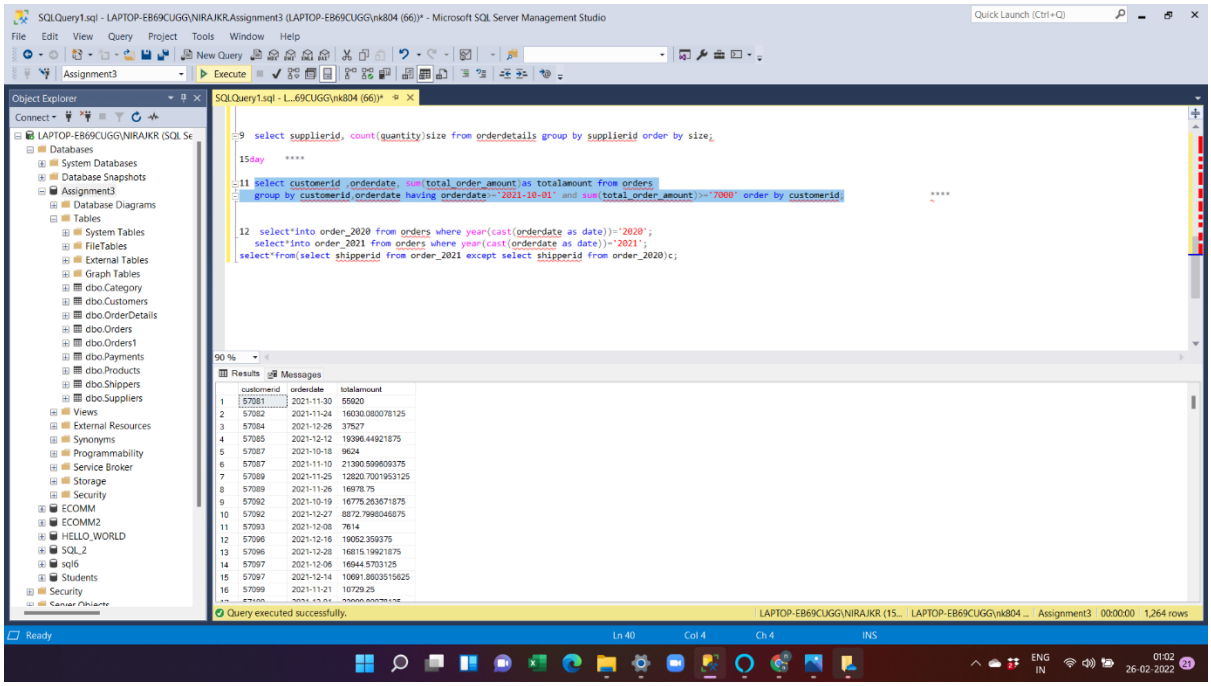

```
select productid,sum(quantity)as total_no_sold from orderdetails group by productid
order by total_no_sold desc;
```

9.



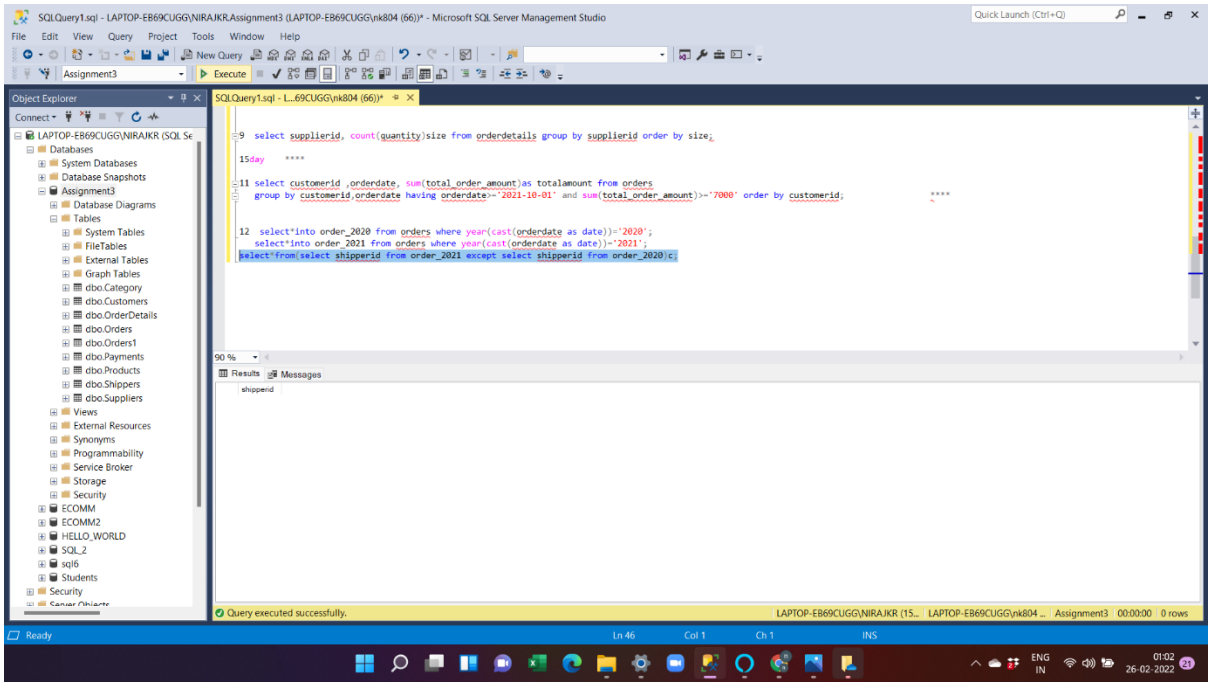

```
select supplierid, count(quantity)size from orderdetails group by supplierid order by
size;
```

11.




```
select customerid ,orderdate, sum(total_order_amount)as totalamount from orders
   group by customerid,orderdate having orderdate>='2021-10-01' and
sum(total_order_amount)>='7000' order by customerid;                    ****
```

12.




```
select*into order_2020 from orders where year(cast(orderdate as date))='2020';
   select*into order_2021 from orders where year(cast(orderdate as date))='2021';
select*from(select shipperid from order_2021 except select shipperid from
order_2020)c;
```

Q.5 ANS: The UNION operation combines the results of two subqueries into a single result that comprises the rows that are returned by both queries.
The INTERSECT operation combines the results of two queries into a single result that comprises all the rows common to both queries

Q.6 ANS: The INTERSECT operation combines the results of two queries into a single result that comprises all the rows common to both queries EXCEPT/MINUS operation finds the difference between the two queries and the result comprises the rows that belong only to the first query

Q.7 ANS : CONCAT_WS() function can do the concatenation along with a separator between strings, whereas in CONCAT() function there is no concept of the separator

Eg: concat() = RAMISBOY and CONCAT_WS()= RAM IS BOY

Q.8 ANS: a. ‘esruoC LQS’

B. SQL

C. ‘SQL Course’