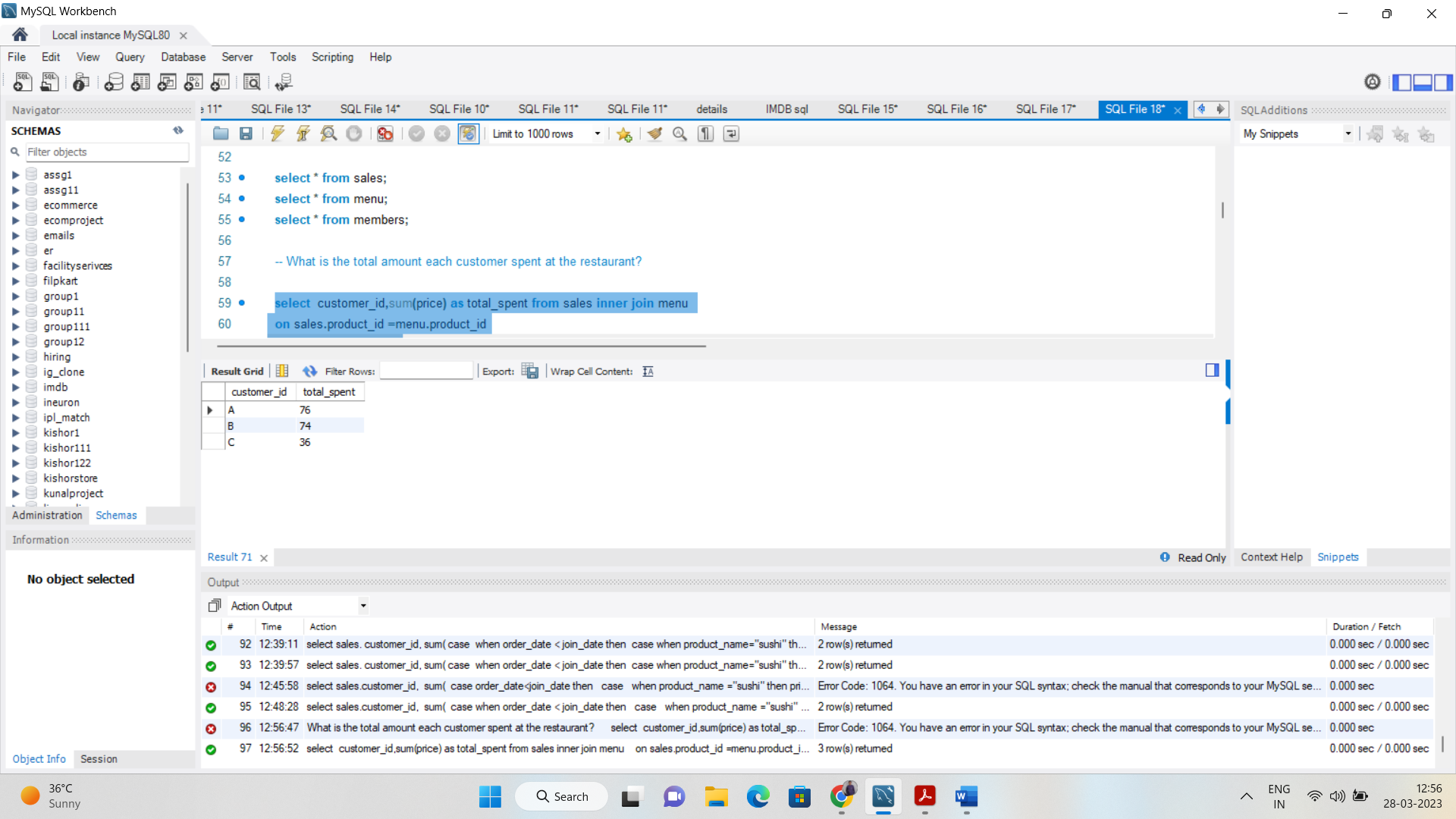
**What is the total amount each customer spent at the restaurant?**

select customer\_id,sum(price) as total\_spent from sales inner join menu

on sales.product\_id =menu.product\_id

group by customer\_id;

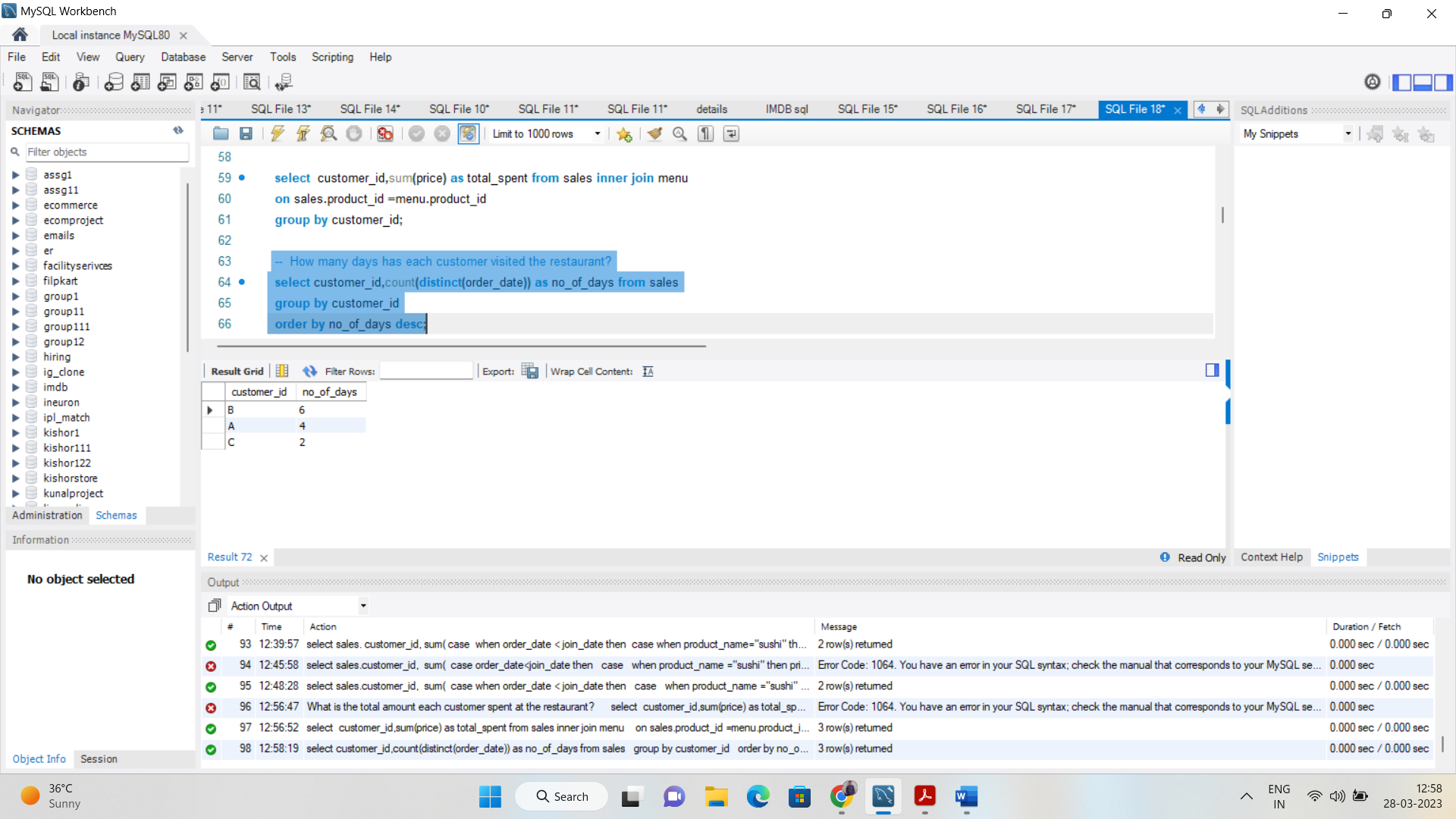


**How many days has each customer visited the restaurant?**

select customer\_id,count(distinct(order\_date)) as no\_of\_days from sales

group by customer\_id

order by no\_of\_days desc;



**What was the first item from the menu purchased by each customer?**

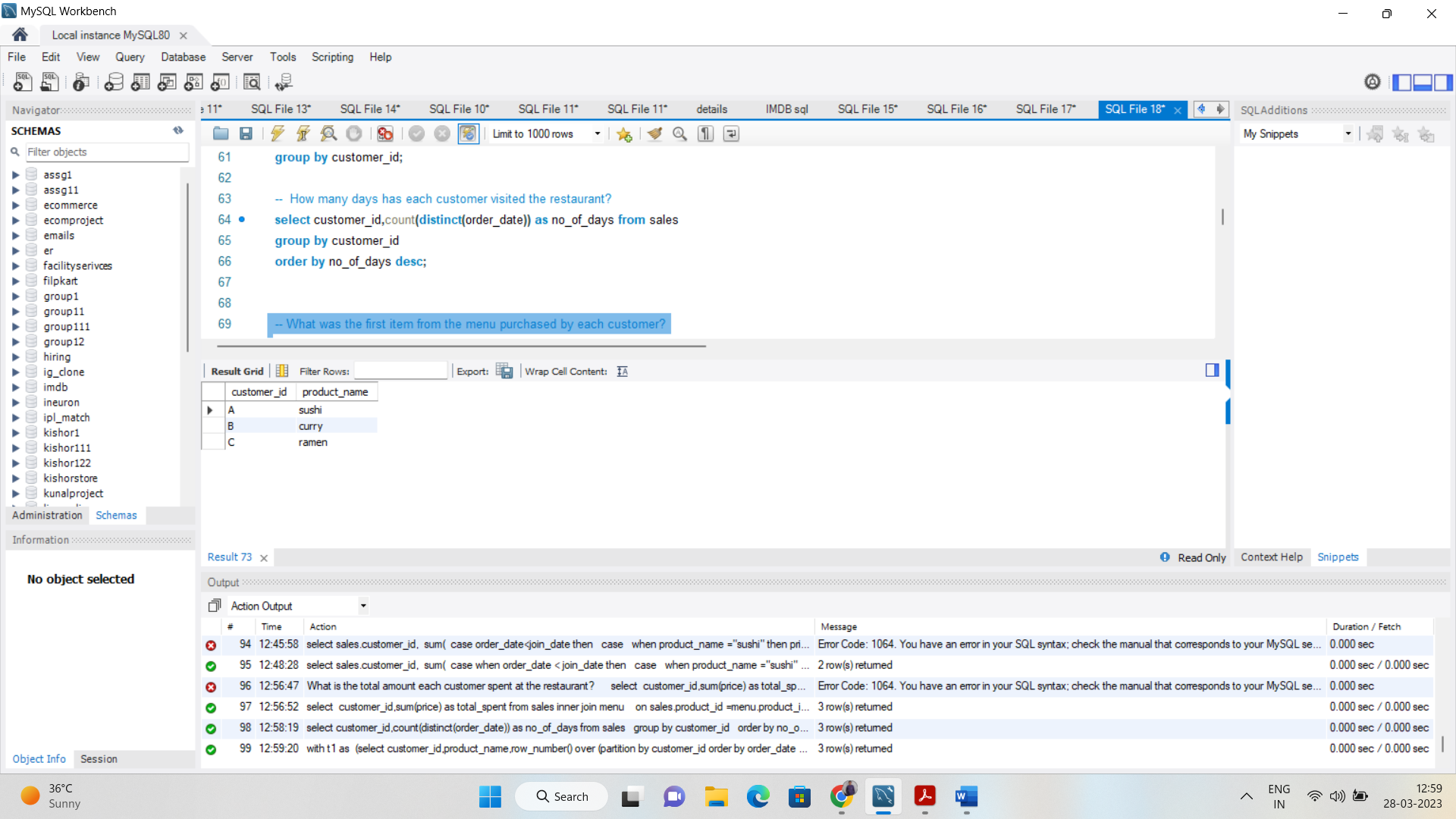
with t1 as

(select customer\_id,product\_name,row\_number() over (partition by customer\_id order by order\_date asc, sales.product\_id asc) as rn from sales

inner join menu

on sales.product\_id =menu.product\_id)

select customer\_id,product\_name from t1 where rn=1;



**What is the most purchased item on the menu and how many times was it purchased by all customers?**

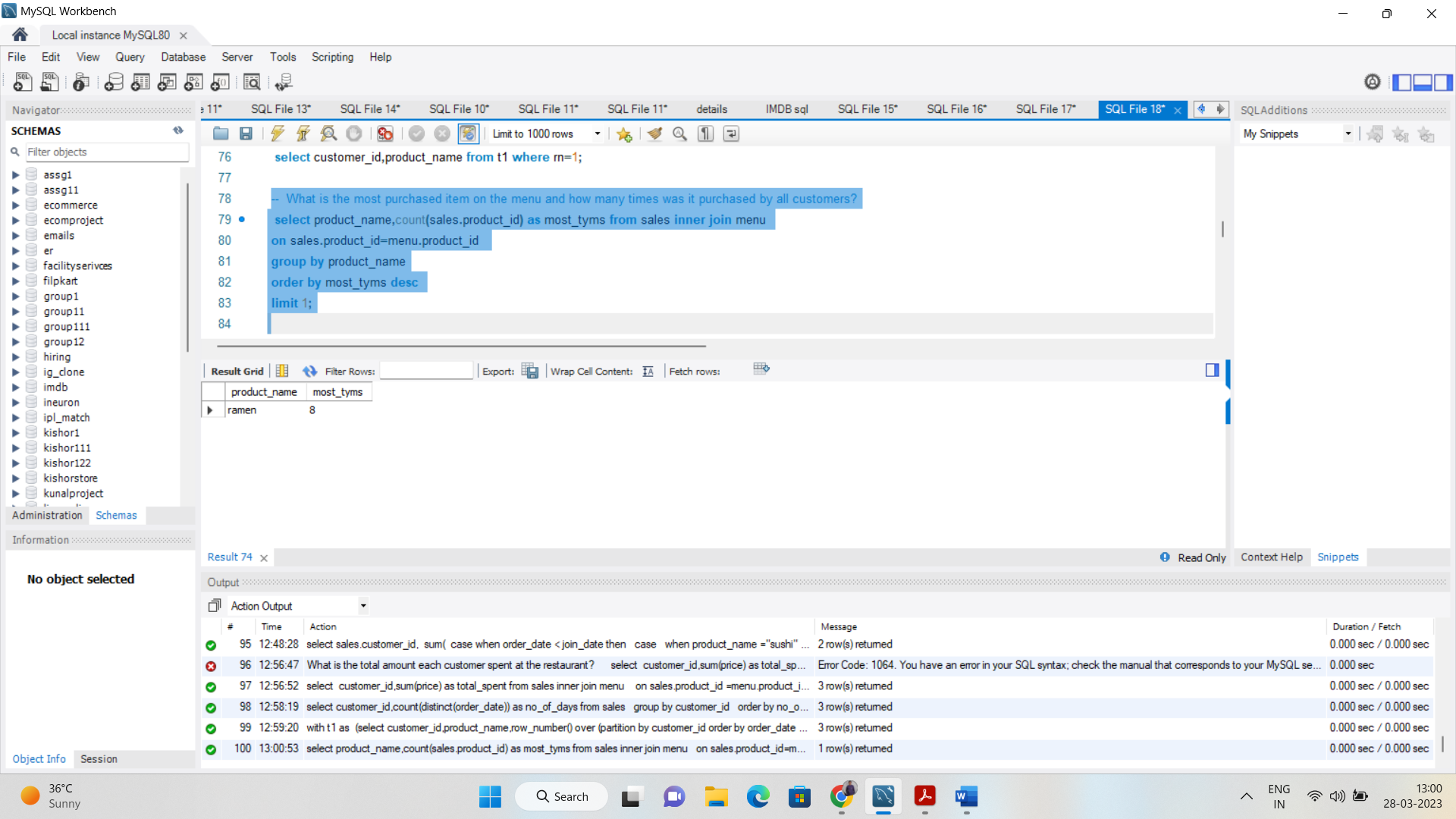
select product\_name,count(sales.product\_id) as most\_tyms from sales inner join menu

on sales.product\_id=menu.product\_id

group by product\_name

order by most\_tyms desc

limit 1;



**Which item was the most popular for each customer?**

with t1 as(

select customer\_id,product\_name,rank() over (partition by customer\_id order by count(sales.product\_id) desc ) as rnk from sales

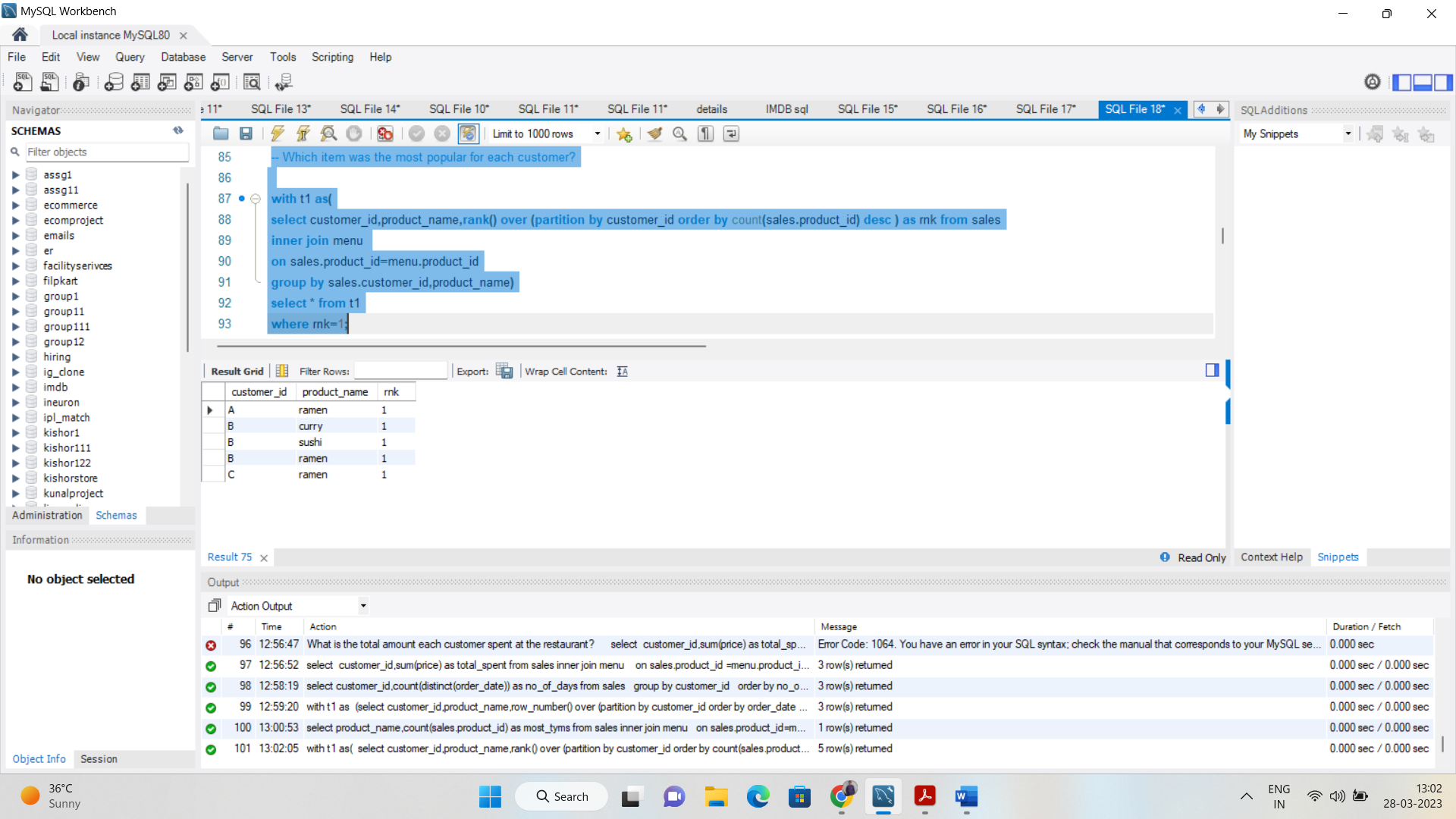
inner join menu

on sales.product\_id=menu.product\_id

group by sales.customer\_id,product\_name)

select \* from t1

where rnk=1;



-- Which item was purchased first by the customer after they became a member?

with t1 as

(select sales.customer\_id,product\_name,sales.product\_id, rank() over (partition by customer\_id order by order\_date,sales.product\_id) as row\_ from sales

inner join menu

on sales.product\_id=menu.product\_id

inner join

members

on sales.customer\_id=members.customer\_id

where order\_date>= join\_date)

select customer\_id,product\_name from t1

where row\_=1;



- Which item was purchased just before the customer became a member?

with t1 as

(select sales.customer\_id,product\_name,sales.product\_id, rank() over (partition by customer\_id order by order\_date desc) as row\_ from sales

inner join menu

on sales.product\_id=menu.product\_id

inner join

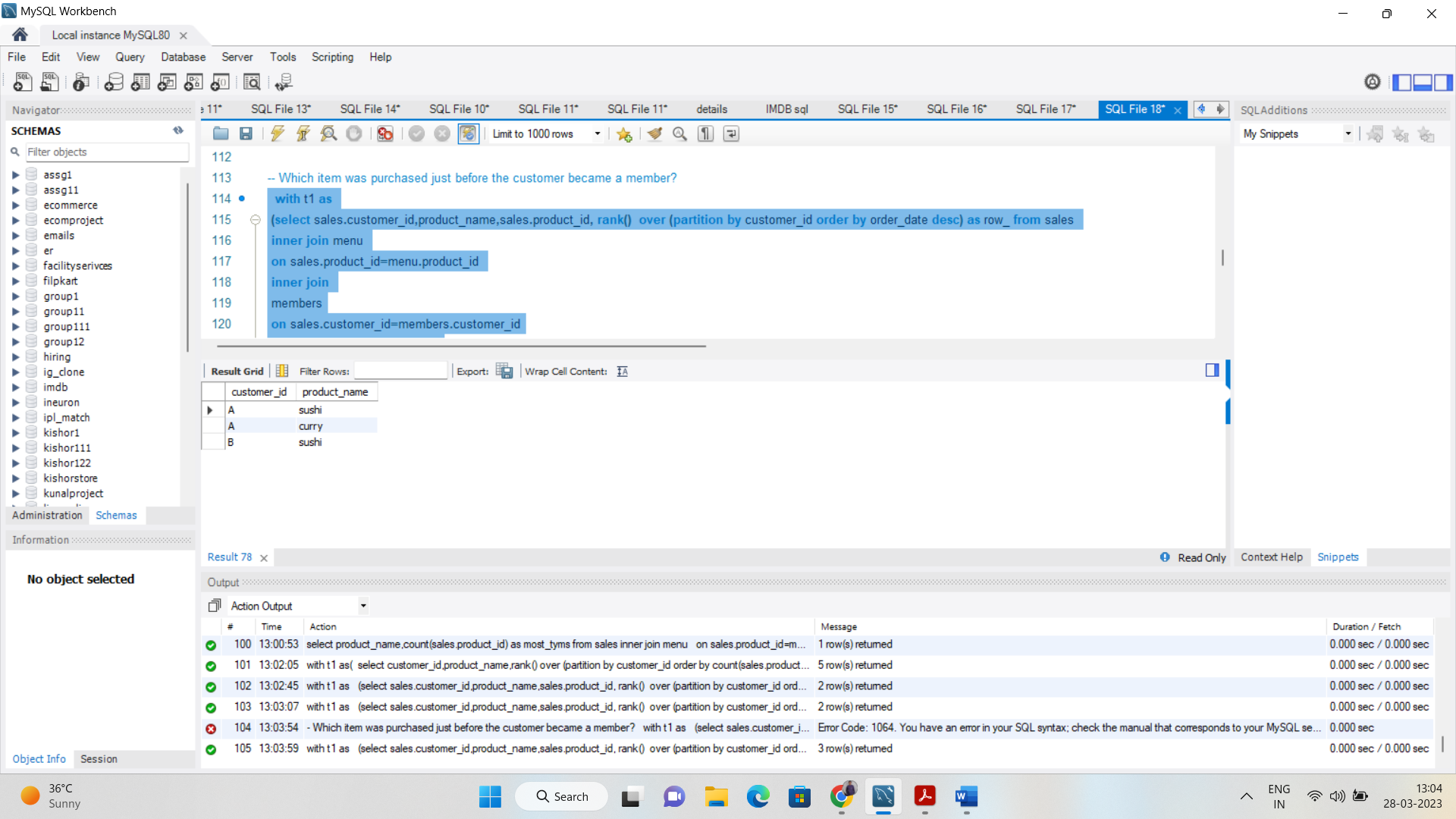
members

on sales.customer\_id=members.customer\_id

where order\_date < join\_date)

select customer\_id,product\_name from t1

where row\_=1;



If each $1 spent equates to 10 points and sushi has a 2x points multiplier - how many points would each customer have?

select sales.customer\_id, sum(

case

when menu.product\_name="sushi" then price\*20

else price\*10

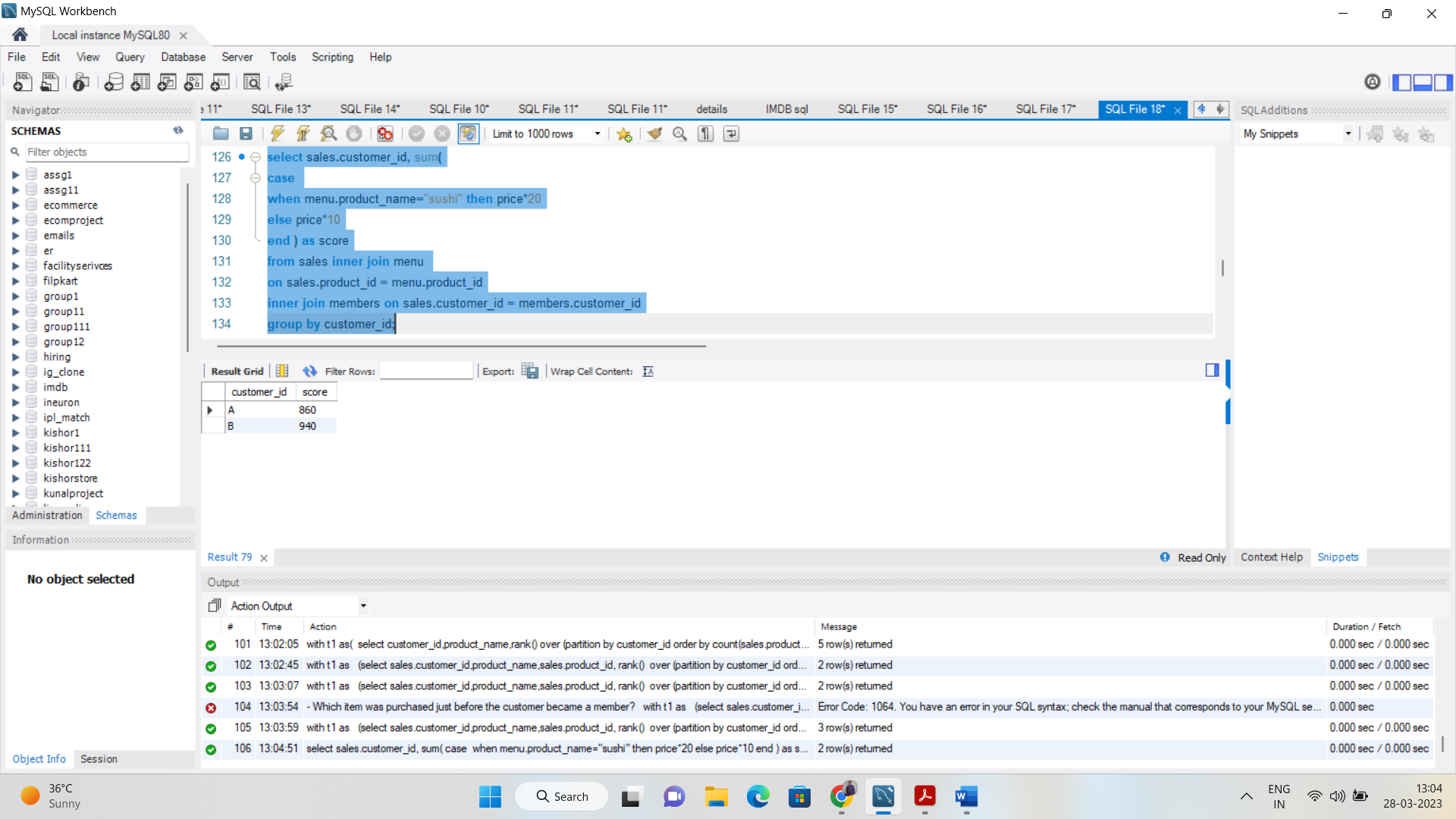
end ) as score

from sales inner join menu

on sales.product\_id = menu.product\_id

inner join members on sales.customer\_id = members.customer\_id

group by customer\_id;



/\*In the first week after a customer joins the program (including their join date) they earn 2x points on all items,

not just sushi - how many points do customer A and B have at the end of January?\*/

select sales. customer\_id,

sum(

case

when order\_date < join\_date then

case when product\_name="sushi" then price\*20

else price \* 10

end

when (order\_date >= join\_date+6)then

case

when product\_name="sushi" then price\*20

else price\*10

end

else price\*20

end ) as points

from members inner join sales

on members.customer\_id=sales.customer\_id

inner join menu

on sales.product\_id=menu.product\_id

where order\_date <= '2021-01-31'

group by customer\_id;

