create table members (

customer\_id varchar2(1) primary key,

join\_date timestamp);

alter table members modify join\_date timestamp;

create table menu (

product\_id integer primary key,

product\_name varchar2(5),

price integer);

create table sales

(

customer\_id varchar2(1) REFERENCES members(customer\_id),

order\_date date,

product\_id integer REFERENCES menu(product\_id)

);

insert all

into menu values(1,'sushi',10)

into menu values(2,'curry',15)

into menu values(3,'ramen',12) select \* from dual;

insert into members values ('A',to\_date('2021-01-07','yyyy-mm-dd'));

insert into members values ('B',to\_date('2021-01-09','yyyy-mm-dd'));

insert into members values ('C',to\_date('2021-01-07','yyyy-mm-dd'));

insert all

into sales values('A',to\_date('2021-01-01','yyyy-mm-dd'),1)

into sales values('A',to\_date('2021-01-01','yyyy-mm-dd'),2)

into sales values('A',to\_date('2021-01-07','yyyy-mm-dd'),2)

into sales values('A',to\_date('2021-01-10','yyyy-mm-dd'),3)

into sales values('A',to\_date('2021-01-11','yyyy-mm-dd'),3)

into sales values('A',to\_date('2021-01-11','yyyy-mm-dd'),3)

into sales values('B',to\_date('2021-01-01','yyyy-mm-dd'),2)

into sales values('B',to\_date('2021-01-02','yyyy-mm-dd'),2)

into sales values('B',to\_date('2021-01-04','yyyy-mm-dd'),1)

into sales values('B',to\_date('2021-01-11','yyyy-mm-dd'),1)

into sales values('B',to\_date('2021-01-16','yyyy-mm-dd'),3)

into sales values('B',to\_date('2021-02-01','yyyy-mm-dd'),3)

into sales values('C',to\_date('2021-01-01','yyyy-mm-dd'),3)

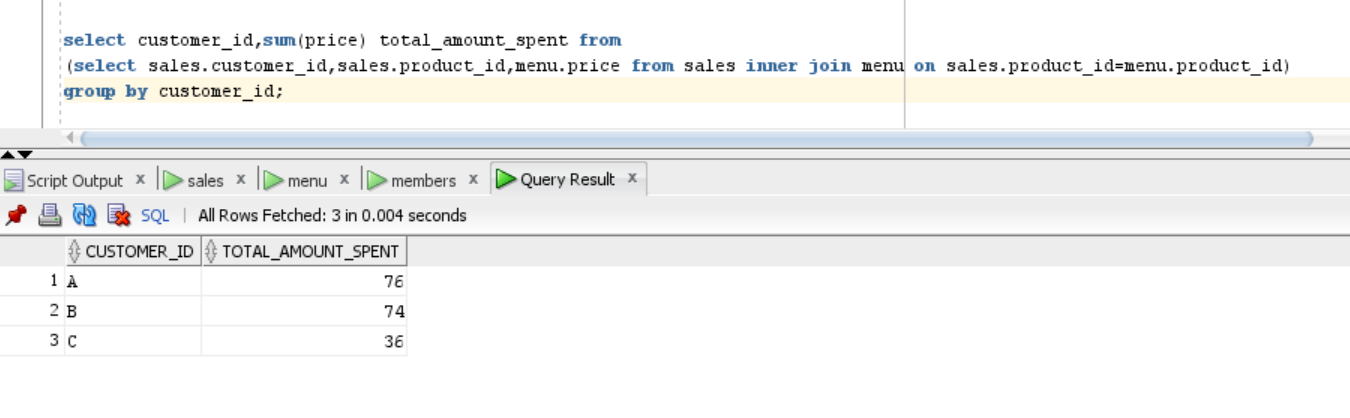
into sales values('C',to\_date('2021-01-01','yyyy-mm-dd'),3)

into sales values('C',to\_date('2021-01-07','yyyy-mm-dd'),3)

select \* from dual;

1)

select customer\_id,sum(price) total\_amount\_spent from(select sales.customer\_id,sales.product\_id,menu.price from sales inner join menu on sales.product\_id=menu.product\_id) group by customer\_id;



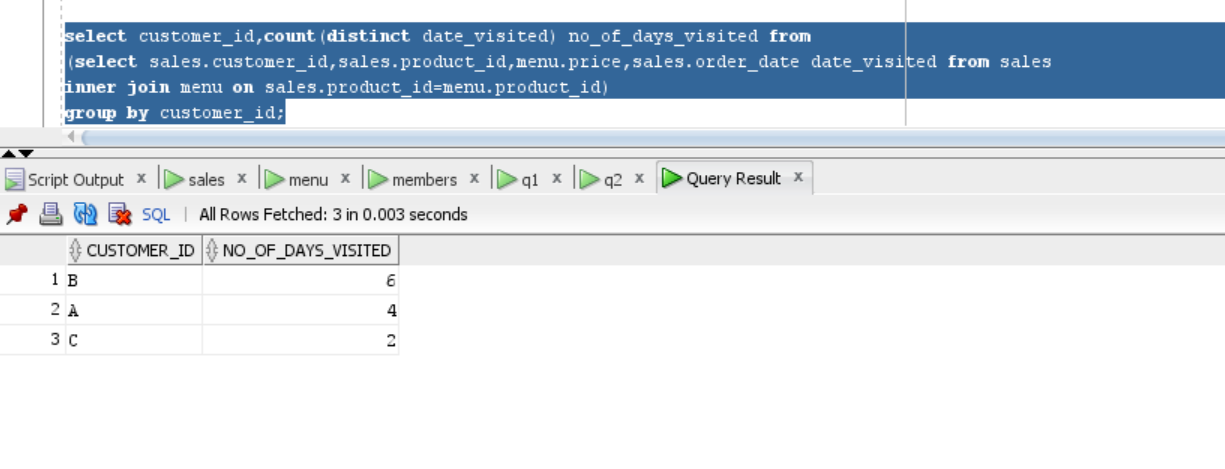
2)

select customer\_id,count(distinct date\_visited) no\_of\_days\_visited from

(select sales.customer\_id,sales.product\_id,menu.price,sales.order\_date date\_visited from sales

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

group by customer\_id;



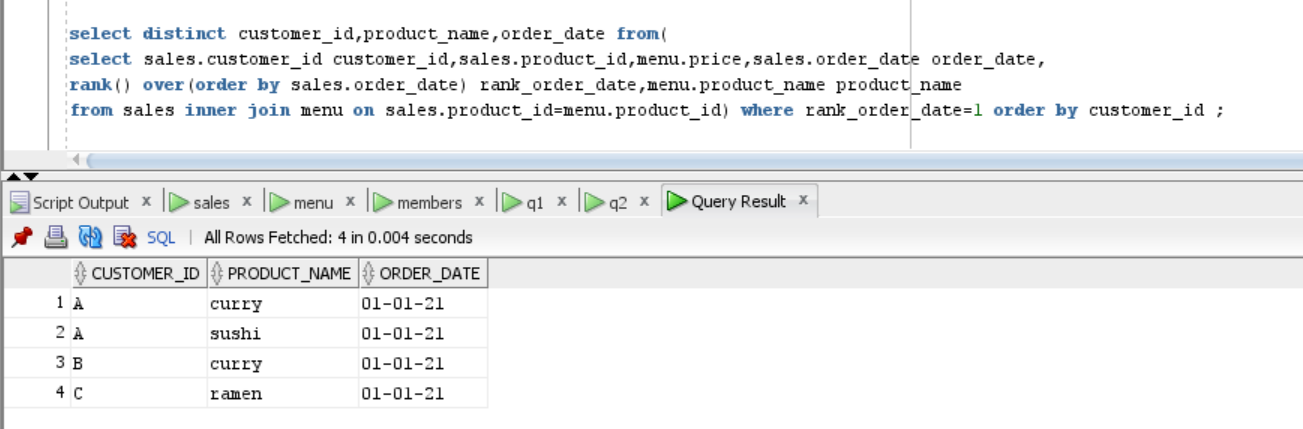
3)

select distinct customer\_id,product\_name,order\_date from(

select sales.customer\_id customer\_id,sales.product\_id,menu.price,sales.order\_date order\_date,

rank() over(order by sales.order\_date) rank\_order\_date,menu.product\_name product\_name

from sales inner join menu on sales.product\_id=menu.product\_id) where rank\_order\_date=1 order by customer\_id ;



4)

select \* from(

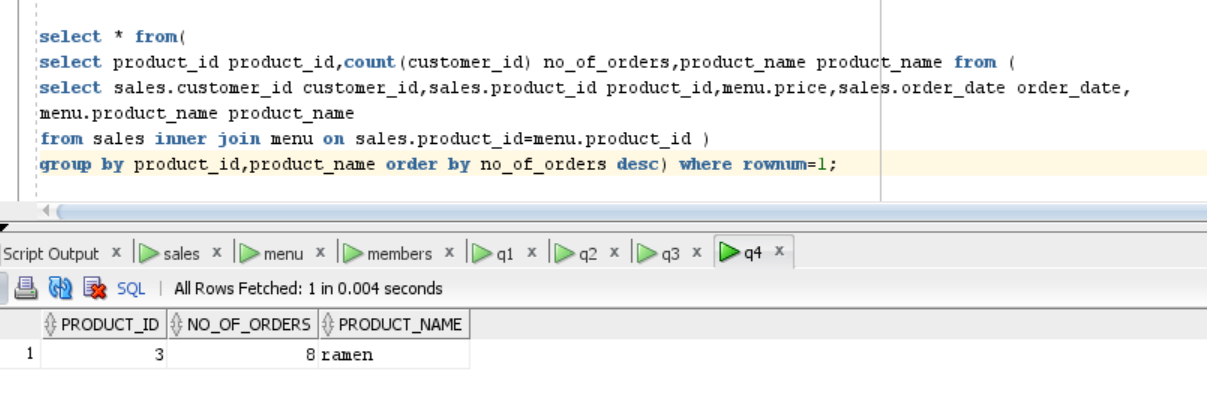
select product\_id product\_id,count(customer\_id) no\_of\_orders,product\_name product\_name from (

select sales.customer\_id customer\_id,sales.product\_id product\_id,menu.price,sales.order\_date order\_date,

menu.product\_name product\_name

from sales inner join menu on sales.product\_id=menu.product\_id )

group by product\_id,product\_name order by no\_of\_orders desc) where rownum=1;



5)

select customer\_id,no\_of\_orders,product\_name from(

select customer\_id,count(product\_id) no\_of\_orders,product\_name product\_name,

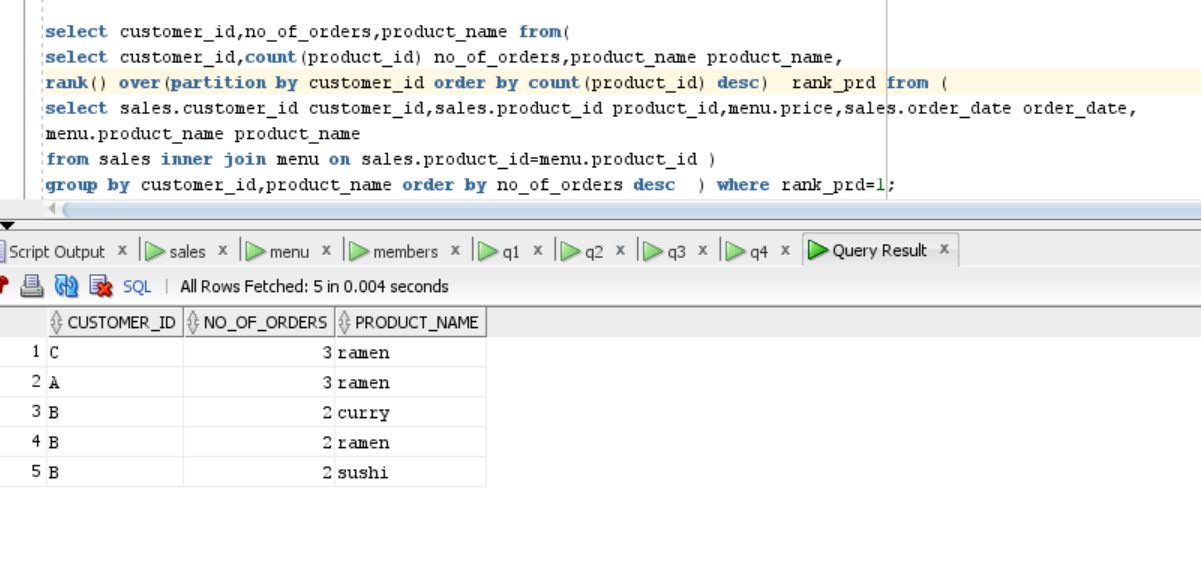
rank() over(partition by customer\_id order by count(product\_id) desc) rank\_prd from (

select sales.customer\_id customer\_id,sales.product\_id product\_id,menu.price,sales.order\_date order\_date,

menu.product\_name product\_name

from sales inner join menu on sales.product\_id=menu.product\_id )

group by customer\_id,product\_name order by no\_of\_orders desc ) where rank\_prd=1;



6)

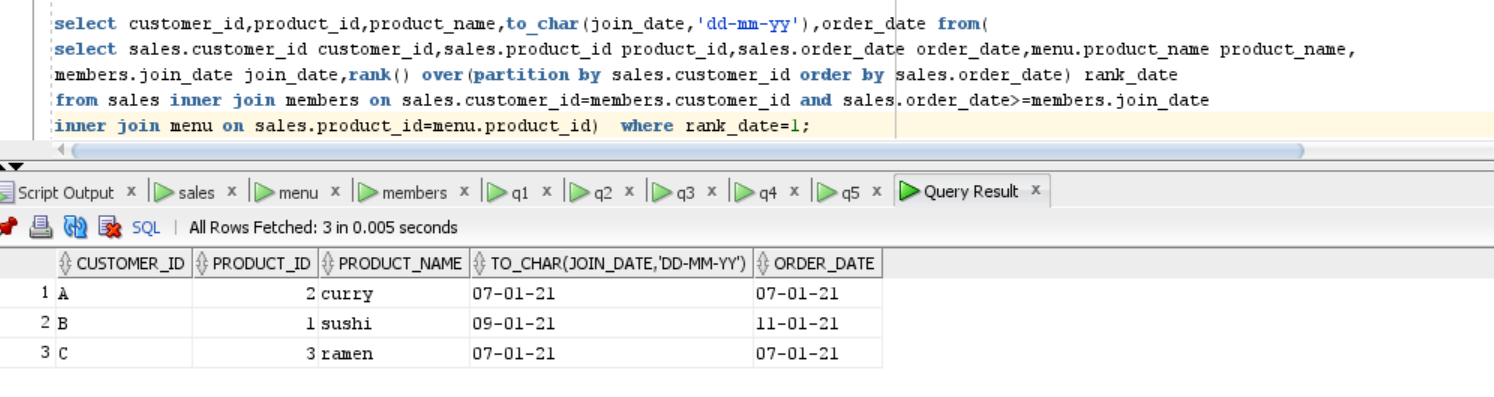
select customer\_id,product\_id,product\_name,to\_char(join\_date,'dd-mm-yy'),order\_date from(

select sales.customer\_id customer\_id,sales.product\_id product\_id,sales.order\_date order\_date,menu.product\_name product\_name,

members.join\_date join\_date,rank() over(partition by sales.customer\_id order by sales.order\_date) rank\_date

from sales inner join members on sales.customer\_id=members.customer\_id and sales.order\_date>=members.join\_date

inner join menu on sales.product\_id=menu.product\_id) where rank\_date=1;



7)

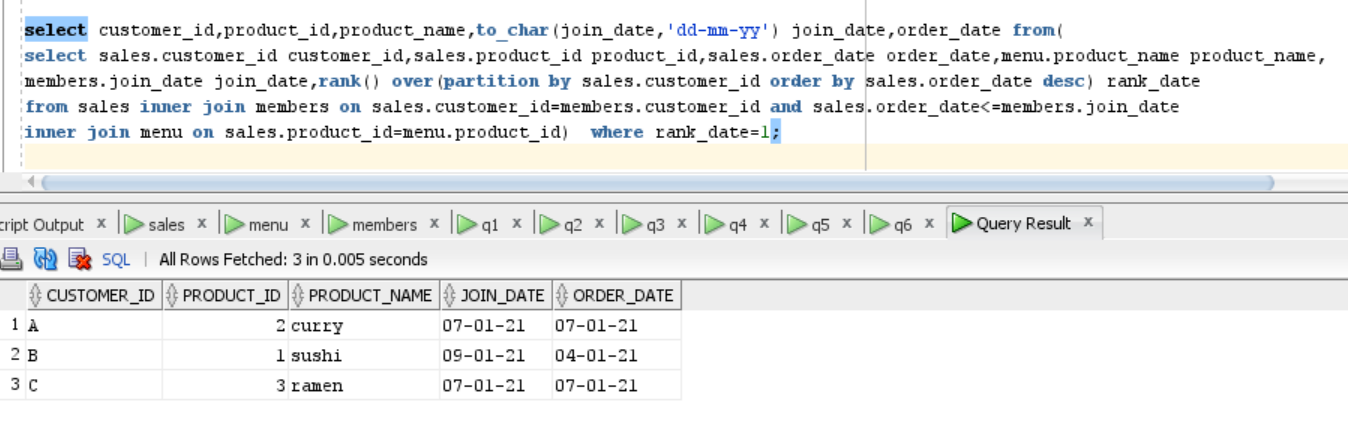
select customer\_id,product\_id,product\_name,to\_char(join\_date,'dd-mm-yy') join\_date,order\_date from(

select sales.customer\_id customer\_id,sales.product\_id product\_id,sales.order\_date order\_date,menu.product\_name product\_name,

members.join\_date join\_date,rank() over(partition by sales.customer\_id order by sales.order\_date desc) rank\_date

from sales inner join members on sales.customer\_id=members.customer\_id and sales.order\_date<=members.join\_date

inner join menu on sales.product\_id=menu.product\_id) where rank\_date=1;



8)

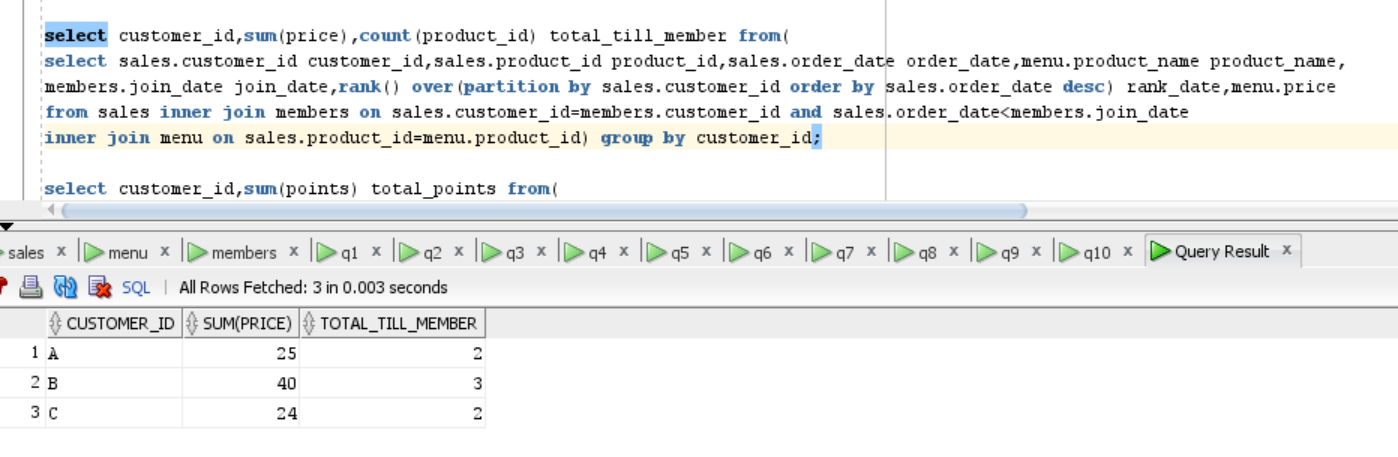
select customer\_id,sum(price),count(product\_id) total\_till\_member from(

select sales.customer\_id customer\_id,sales.product\_id product\_id,sales.order\_date order\_date,menu.product\_name product\_name,

members.join\_date join\_date,rank() over(partition by sales.customer\_id order by sales.order\_date desc) rank\_date,menu.price

from sales inner join members on sales.customer\_id=members.customer\_id and sales.order\_date<members.join\_date

inner join menu on sales.product\_id=menu.product\_id) group by customer\_id;



9)

select customer\_id,sum(points) total\_points from(

select sales.customer\_id customer\_id,sales.product\_id product\_id,menu.product\_name product\_name,menu.price,

case menu.product\_name

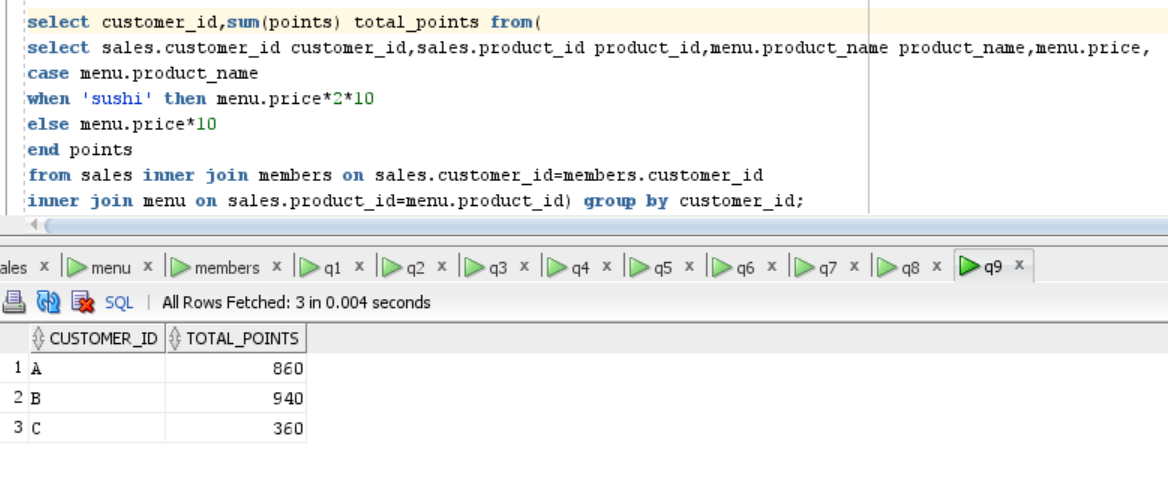
when 'sushi' then menu.price\*2\*10

else menu.price\*10

end points

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

inner join menu on sales.product\_id=menu.product\_id) group by customer\_id;



10)

select customer\_id,sum(points) total\_points from (

select sales.customer\_id customer\_id,sales.product\_id product\_id,menu.product\_name product\_name,menu.price,

sales.order\_date-to\_date(to\_char(members.join\_date,'dd-mm-yy')) no\_of\_days,sales.order\_date order\_date,

case

when

(sales.order\_date-to\_date(to\_char(members.join\_date,'dd-mm-yy')) >0) and

(sales.order\_date-to\_date(to\_char(members.join\_date,'dd-mm-yy'))<7) then menu.price\*2\*10

else( case when product\_name ='sushi' then price\*10\*2 else price\*10 end )

end points

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

inner join menu on sales.product\_id=menu.product\_id ) where order\_date < to\_date('01-02-21','dd-mm-yy') group by customer\_id ;

