```
create database customers01;
use customers01;

create table sales(customer_id char,order_date date,product_id int);
INSERT INTO sales (customer_id, order_date, product_id) VALUES
('A', '2021-01-01', 1),
('A', '2021-01-01', 2),
('A', '2021-01-07', 2),
('A', '2021-01-10', 3),
('A', '2021-01-11', 3),
('A', '2021-01-11', 3),
('B', '2021-01-01', 2),
('B', '2021-01-02', 2),
('B', '2021-01-04', 1),
('B', '2021-01-11', 1),
('B', '2021-01-16', 3),
('B', '2021-02-01', 3),
('C', '2021-01-01', 3),
('C', '2021-01-01', 3),
('C', '2021-01-07', 3);

create table  menu(product_id int,product_name varchar(50),price int);
INSERT INTO menu (product_id, product_name, price) VALUES
(1, 'sushi', 10),
(2, 'curry', 15),
(3, 'ramen', 12);

create table Members(customer_id char,join_date date);
INSERT INTO Members (customer_id, join_date) VALUES
('A', '2021-01-07'),
('B', '2021-01-09');
```

1) select customer_id,sum(price) as total_amount from sales
Inner join menu on sales.product_id=menu.product_id
group by customer_id;

2) select customer_id,count(distinct order_date) from sales
group by customer_id;

3) select customer_id,product_name,min(order_date) from sales
inner join menu on sales.product_id=menu.product_id
group by customer_id,product_name;

4) select customer_id,product_name,count(*) from sales
inner join menu on sales.product_id=menu.product_id
group by customer_id,product_name;

5) select customer_id,product_name,count(product_name) from sales
inner join menu on sales.product_id=menu.product_id
group by customer_id,product_name
;

```
select customer_id,product_name,count(product_name)as most_popular
from sales inner join menu on sales.product_id=menu.product_id
where customer_id='A'
group by customer_id,product_name
order by  most_popular desc;

select customer_id,product_name,count(product_name) as most_popular
from sales inner join menu on sales.product_id=menu.product_id
where customer_id='B'
group by customer_id,product_name
order by  most_popular desc;

select customer_id,product_name,count(product_name) as most_popular
from sales inner join menu on sales.product_id=menu.product_id
where customer_id='C'
group by customer_id,product_name
order by  most_popular desc;
```

6) select customer_id, product_name from sales
inner join members ON sales.customer_id = members.customer_id
inner join menu ON sales.product_id = menu.product_id
where
sales.order_date > members.join_date
group by
customer_id,product_name;

7) select customer_id, product_name from sales
inner join members ON sales.customer_id = members.customer_id
inner join menu ON sales.product_id = menu.product_id
where
sales.order_date < members.join_date
group by
customer_id,product_name;

8) select sales.customer_id,count(menu.product_id),sum(price) from sales
inner join members on sales.customer_id=members.customer_id
inner join menu on sales.product_id = menu.product_id
where sales.order_date < members.join_date
group by
sales.customer_id;

9)
```
select customer_id,
sum(
  case when product_name = 'sushi' then price * 20
       ELSE price * 10
  end
) as total_points
from
sales
join  menu on sales.product_id = menu.product_id
group by
customer_id;
```

10)
```
select
sales.customer_id, order_date,
sum(
   case
      when order_date <=join_date then price * 20
      Else price * 10
   end
) as total_points
from
sales
inner join  menu on sales.product_id = menu.product_id
inner join  members ON sales.customer_id = members.customer_id
where sales.customer_id in ('A', 'B') and month(order_date) = 1
group by
sales.customer_id,order_date;
```