

```
create table merchant (  
    M_id varchar2(5) PRIMARY KEY,  
    M_name varchar2(15),  
    Rating float CHECK(rating>=0 AND rating<=15)  
);
```

```
insert into merchant values('1s','Abhay',3.3);  
insert into merchant values('2s','Priya',1.0);  
insert into merchant values('3s','Kishan',4.8);  
insert into merchant values('4s','Vicky',4.3);  
insert into merchant values('5s','Sneha',3.6);  
insert into merchant values('6s','Pushpa',2.8);
```

```
create table category (  
    category_id varchar(5) PRIMARY KEY,  
    category Varchar(20)  
);
```

```
insert into category values('1c','books');
```

```
insert into category values('2c','footwear');  
insert into category values('3c','home decor');  
insert into category values('4c','accessories');
```

```
create table product (  
    product_id varchar(5) PRIMARY KEY,  
    product varchar(50),  
    amount number,  
    quantity_remaining number,  
    category_id varchar(5),  
    m_id varchar(5),  
    FOREIGN KEY(category_id) REFERENCES  
category(category_id),  
    FOREIGN KEY(m_id) REFERENCES  
merchant(m_id)  
);
```

```
insert into product values('1p', 'the programming  
language of oracle',350,4, '1c', '1s');  
insert into product values('2p', 'nike white shoes  
,7000,2, '2c','3s');
```

```
insert into product values('3p', 'white  
lamp',800,3,'3c','3s');
```

```
insert into product values('4p','antique silver  
earrings',400,7, '4c','2s');
```

```
insert into product values('5p','antique silver  
bracelet',700,5,'4c','6s');
```

```
insert into product values('6p','catwalk leather  
flats',1599,3,'2c','4s');
```

```
insert into product values('7p','introduction to  
java',650,8,'1c','5s');
```

```
insert into product values('8p','portico kingsize  
bedsheet',1999,1,'3c','1s');
```

```
insert into product values('9p','book  
rack',999,1,'3c','4s');
```

```
insert into product values('10p','artificial  
intelligence, 3rd edition',570,9,'1c','2s');
```

```
insert into product values('11p', 'introduction to  
python',630,10,'1c','5s');
```

```
create table customer (
```

```
    customer_id varchar2(5) PRIMARY KEY,
```

```
    name varchar2(30) NOT NULL,
```

```
password varchar2(25) NOT NULL  
);
```

```
insert into customer values('1cu', 'john', 'john123');
```

```
insert into customer values('2cu', 'ben', 'ben123');
```

```
insert into customer values('3cu', 'lili', 'lili123');
```

```
insert into customer values('4cu', 'tom', 'tom123');
```

```
insert into customer values('5cu', 'rohit', 'rohit123');
```

```
insert into customer values('6cu', 'raj', 'raj123');
```

```
insert into customer values('7cu', 'aditya',  
'aditya123');
```

```
insert into customer values('8cu', 'alice', 'alice123');
```

```
insert into customer values('9cu', 'james',  
'james123');
```

```
insert into customer values('10cu', 'mike',  
'mike123');
```

```
create table orders (
```

```
order_id varchar2(5) PRIMARY KEY,
```

```
customer_id varchar2(5),
```

```
    amount number,  
    orderdate DATE,  
    FOREIGN KEY(customer_id) REFERENCES  
customer(customer_id)  
);
```

```
insert into orders values('1o','1cu',350,'21-jan-22');
```

```
insert into orders values('2o','1cu',350,'20-  
may-22');
```

```
insert into orders values('3o','2cu',800, '20-  
may-22');
```

```
insert into orders values('4o','3cu',400, '12-feb-22');
```

```
insert into orders values('5o','4cu',630, '11-jan-22');
```

```
insert into orders values('6o','4cu',630, '12-jan-22');
```

```
insert into orders values('7o','6cu',999, '06-jan-22');
```

```
insert into orders values('8o','7cu',999, '07-  
mar-22');
```

```
insert into orders values('9o','8cu',1999, '20-  
mar-22');
```

```
insert into orders values('10o','10cu',1599, '17-  
mar-22');
```

```
create table order_product (  
    order_id varchar(5) PRIMARY KEY,  
    product_id varchar(5),  
    quantity number,  
    m_id varchar(5),  
    original_amt number,  
    discount number,  
    product_rating float,  
    FOREIGN KEY(order_id) REFERENCES  
orders(order_id),  
    FOREIGN KEY(product_id) REFERENCES  
product(product_id),  
    FOREIGN KEY(m_id) REFERENCES  
merchant(m_id)  
);
```

```
insert into order_product  
values('1o','1p',1,'1s',350,0,4);
```

```
insert into order_product  
values('2o','1p',1,'1s',350,0,5);
```

```
insert into order_product  
values('3o','3p',1,'5s',800,0,4);
```

```
insert into order_product  
values('4o','4p',1,'2s',400,0,3);
```

```
insert into order_product  
values('5o','4p',1,'2s',400,0,2);
```

```
insert into order_product  
values('6o','6p',1,'2s',1599,0,1);
```

```
insert into order_product  
values('7o','7p',1,'5s',650,0,1);
```

```
insert into order_product  
values('8o','8p',1,'1s',1999,0,5);
```

```
insert into order_product  
values('9o','9p',1,'4s',999,0,4);
```

```
insert into order_product  
values('10o','11p',1,'4s',999,0,4);
```

1

```
select * from product
```

```
where product_id in (
```

```
    select product_id from (
```

```
        select product_id,count(order_id) from
```

```
order_product
    group by product_id
    having count(order_id) = (
        select min(count(order_id)) from
order_product
        group by product_id
    )
)
);
```

2

```
insert into merchant values('7s','xavi',4.3);
```

3

```
insert into product values('12p','jabra
headphone',5000,2,'4c','2s');
```

4

```
insert into category values('5c','lifestyle');
```


5

```
select * from product
where product_id not in (
    select product_id from order_product
);
```

6

```
select * from merchant
where m_id IN (
    select m_id from product
    where product_id in (
        select product_id from order_product
        where order_id in (
            select order_id from orders
            where not orderdate = sys date
        )
    )
);
```

7

```
select * from merchant
where m_id in (
    select m_id from orders, order_product
    where orders.order_id=order_product.order_id
    and orderdate = '20-MAY-22'
    having count(m_id) = (
        select max(count(m_id)) from orders,
order_product
        where orders.order_id =
order_product.order_id
        and orderdate = '20-MAY-22'
        group by m_id
    )
    group by m_id
);
```

8

```
select * from merchant
where rating = (
```

```
select max(rating) from merchant  
);
```

9

```
select* from customer  
where customer_id = (  
    select customer_id from (  
        select customer_id, category_id,  
count(order_id) from (  
            select o.order_id, o.product_id,  
p.category_id, oi.customer_id from product p,  
orders oi, order_product o  
            where o.order_id = oi.order_id and  
o.product_id = p.product_id  
        )  
        group by customer_id, category_id  
        having count(order_id) > 1  
    )  
);
```

10

```
select* from merchant
where m_id in (
    select m_id from (
        select m_id, count(order_id), dense_rank()
over(order by count(order_id) desc) r from
order_product
        group by m_id
    )
    where r=3
);
```

11

```
select* from product
where quantity_remaining <= 5;
```

12

```
alter table merchant
add address varchar2(15);
```

13

```
create table old_orders (  
    order_id varchar2(5),  
    customer_id varchar2(5),  
    amount number,  
    orderdate date  
);
```

14

```
insert into old_orders  
select* from orders  
where (extract(year from orderdate)) < 22;
```