

Institute of computer technology

B.Tech-CSE(BDA)

Name:- Shaikh Anik

Sem:-3

Enrollment no.:-23162121021

Batch:-31

Sub:-DBMS

Date:-21/8/24

Practical 6

Q:- Solve the following queries using sub queries:-

- 1) Find the product_no and description of non moving products i.e. product not being sold.
- 2) Find the customer name, address1, address2, city and pincode for the client who has placed order no 'O1901'.
- 3) Find out if the product 'Mouse' has been ordered by any client and print the client_no, name to whom it was sold.

A=> Query:- use BDA_23162121021;

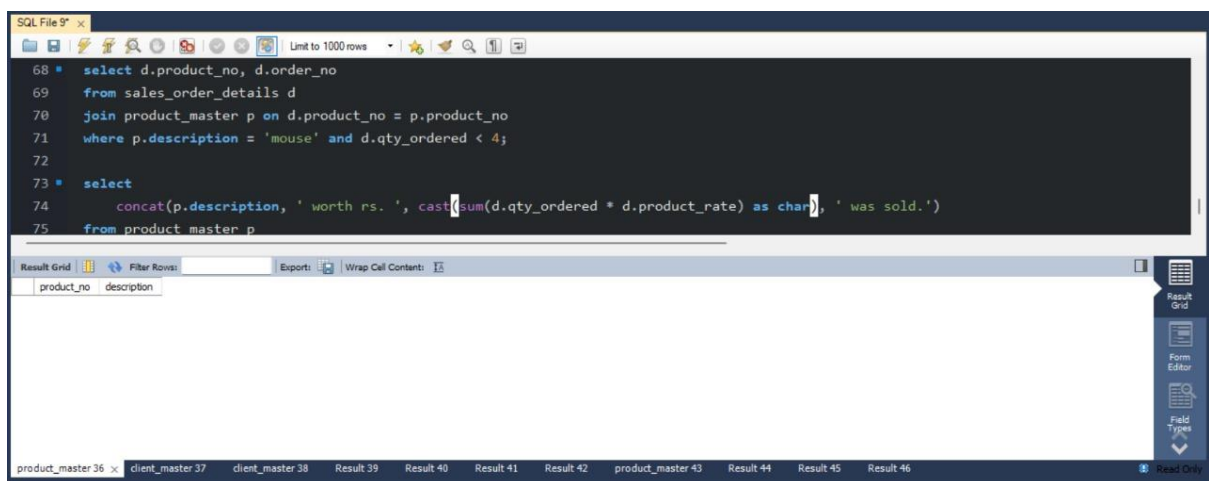
- 1) select p.product_no, p.description from product_master p
where p.product_no not in (select product_no from sales_order_details);
- 2) select c.name, c.city, c.pincode

```
from client_master c
where c.client_no = (
    select client_no
    from sales_order
    where order_no = 'o1901');
```

```
3) select c.client_no, c.name
from client_master c
where c.client_no in (
    select client_no
    from sales_order_details
    where product_no = (
        select product_no
        from product_master
        where description = 'mouse'
    )
);
```

Screenshot:-

1



2

The screenshot shows a SQL File 9 window with a query and its result. The query is as follows:

```

68 select d.product_no, d.order_no
69 from sales_order_details d
70 join product_master p on d.product_no = p.product_no
71 where p.description = 'mouse' and d.qty_ordered < 4;
72
73 select
74 concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')
75 from product_master p
  
```

The result grid shows the following data:

name	city	pincode
Ivan	Bombay	400054

The bottom of the window shows a tab bar with the following tabs: product_master 36, client_master 37, client_master 38, Result 39, Result 40, Result 41, Result 42, product_master 43, Result 44, Result 45, Result 46. The 'client_master 37' tab is selected.

3

The screenshot shows a SQL File 9 window with a query and its result. The query is as follows:

```

68 select d.product_no, d.order_no
69 from sales_order_details d
70 join product_master p on d.product_no = p.product_no
71 where p.description = 'mouse' and d.qty_ordered < 4;
72
73 select
74 concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')
75 from product_master p
  
```

The result grid shows the following data:

client_no	name
C001	Ivan
C002	Vandana
C003	Pramada
C004	Basu
C005	Ravi
C006	Rukmani

The bottom of the window shows a tab bar with the following tabs: product_master 36, client_master 37, client_master 38, Result 39, Result 40, Result 41, Result 42, product_master 43, Result 44, Result 45, Result 46. The 'client_master 38' tab is selected.

Q:- Queries using Having and Group By Clause:

- 1) Print the description and total qty sold for each product.
- 2) Find the value of each product sold.
- 3) Find out the sum total of all the billed orders for the month of January

A=> Query:-

- 1) select p.description, sum(s.qty_ordered) as total_qty_sold

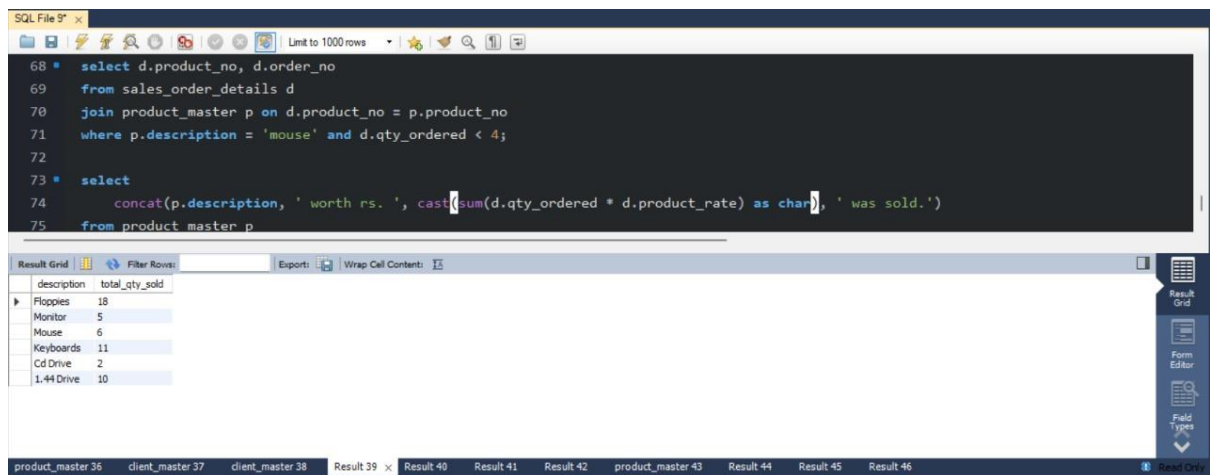
```
from product_master p
join sales_order_details s on p.product_no = s.product_no
group by p.description;
```

```
2) select p.description, sum(s.qty_ordered * s.product_rate) as total_value_sold
from product_master p
join sales_order_details s on p.product_no = s.product_no
group by p.description;
```

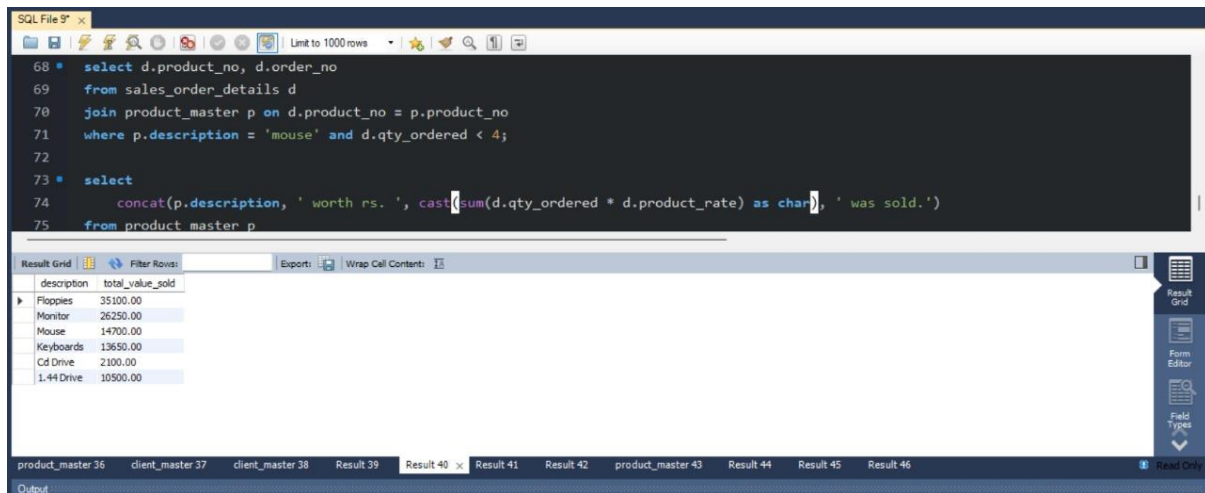
```
3) select sum(s.Billed_yn) as total_billed_orders
from sales_order s
where s.order_date between '01-jan-2023' and '31-jan-2023';
```

Screenshot:-

1



2



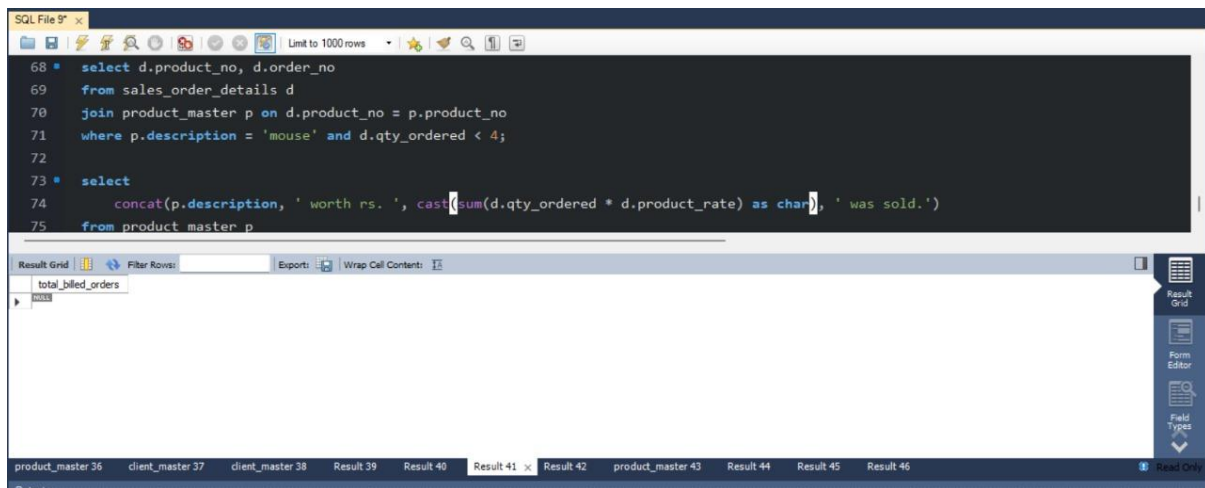
```

68 select d.product_no, d.order_no
69 from sales_order_details d
70 join product_master p on d.product_no = p.product_no
71 where p.description = 'mouse' and d.qty_ordered < 4;
72
73 select
74 concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')
75 from product_master p

```

description	total_value_sold
Floppies	35100.00
Monitor	26250.00
Mouse	14700.00
Keyboards	13650.00
Cd Drive	2100.00
1.44 Drive	10500.00

3



```

68 select d.product_no, d.order_no
69 from sales_order_details d
70 join product_master p on d.product_no = p.product_no
71 where p.description = 'mouse' and d.qty_ordered < 4;
72
73 select
74 concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')
75 from product_master p

```

total_billed_orders

Q:- Queries on Joins and Correlation:

- 1) Find out the products, which have been sold to 'Ivan'.
- 2) Find the product_no and description of constantly sold i.e. rapidly moving products.
- 3) Find the names of clients who have purchased 'Cd Drive'.
- 4) List the product number and order number from customers who have ordered less than 4 units of 'Mouse'.

A=> Query:-

- 1) select p.product_no, p.description
from product_master p

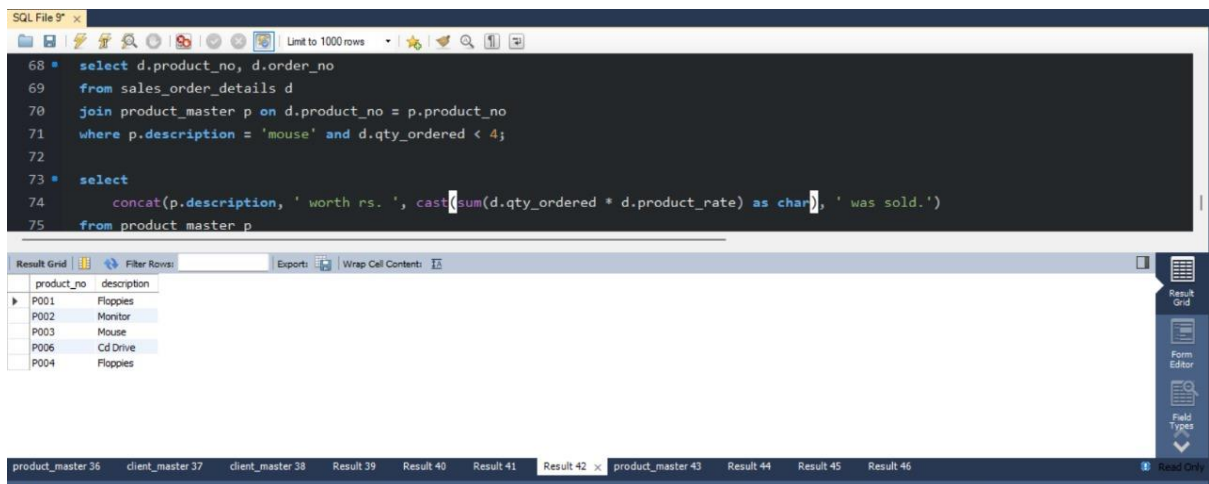
```
join sales_order_details s on p.product_no = s.product_no
join sales_order o on s.order_no = o.order_no
join client_master c on o.client_no = c.client_no
where c.name = 'ivan';
```

```
2) select p.product_no, p.description
from product_master p
where p.product_no in (
    select product_no
    from sales_order_details
    group by product_no
    having count(*) >= 3);
```

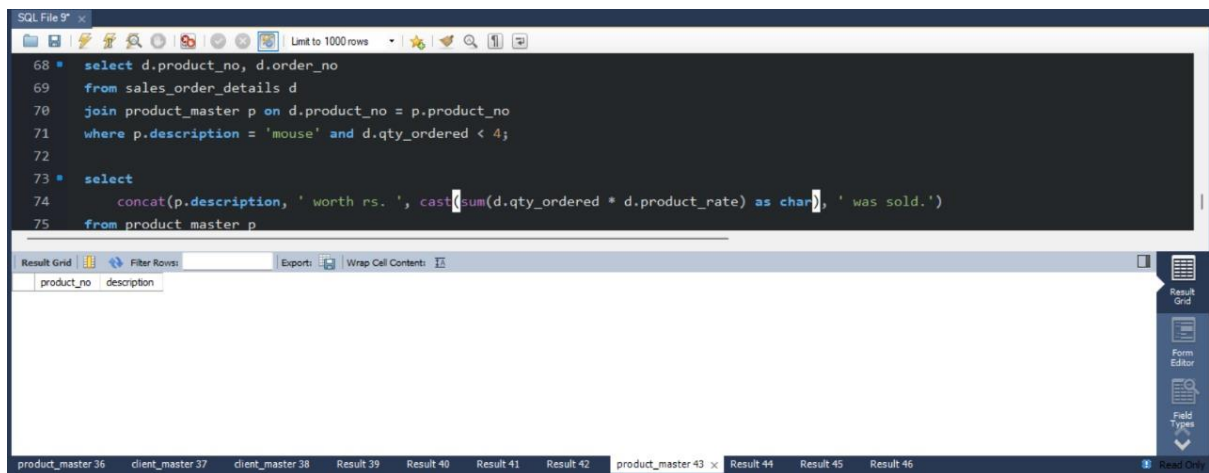
```
3) select c.name
from client_master c
join sales_order o on c.client_no = o.client_no
join sales_order_details d on o.order_no = d.order_no
join product_master p on d.product_no = p.product_no
where p.description = 'cd drive'
group by c.name;
```

```
4) select d.product_no, d.order_no
from sales_order_details d
join product_master p on d.product_no = p.product_no
where p.description = 'mouse' and d.qty_ordered < 4;
```

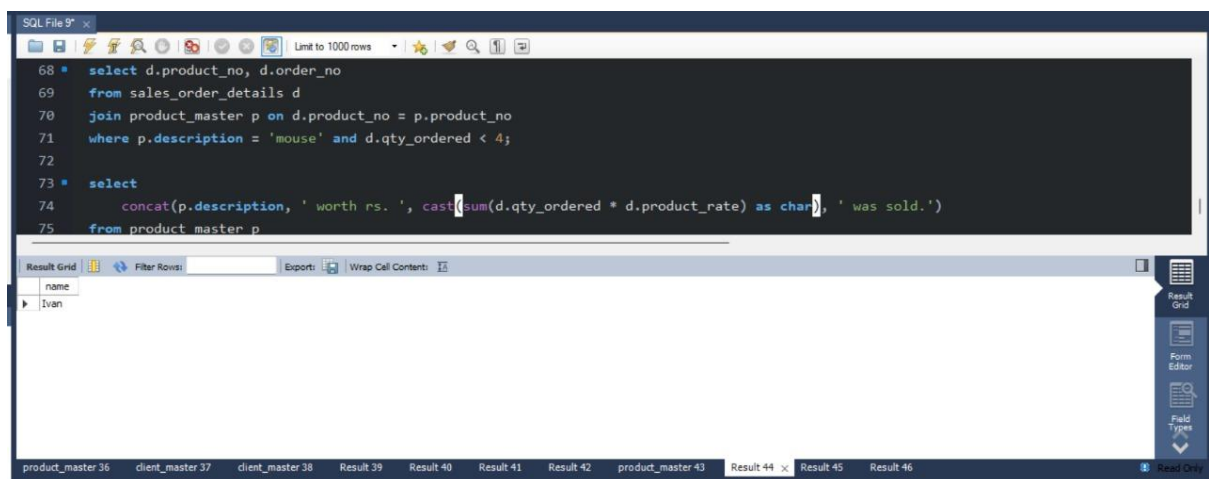
Screenshot:-



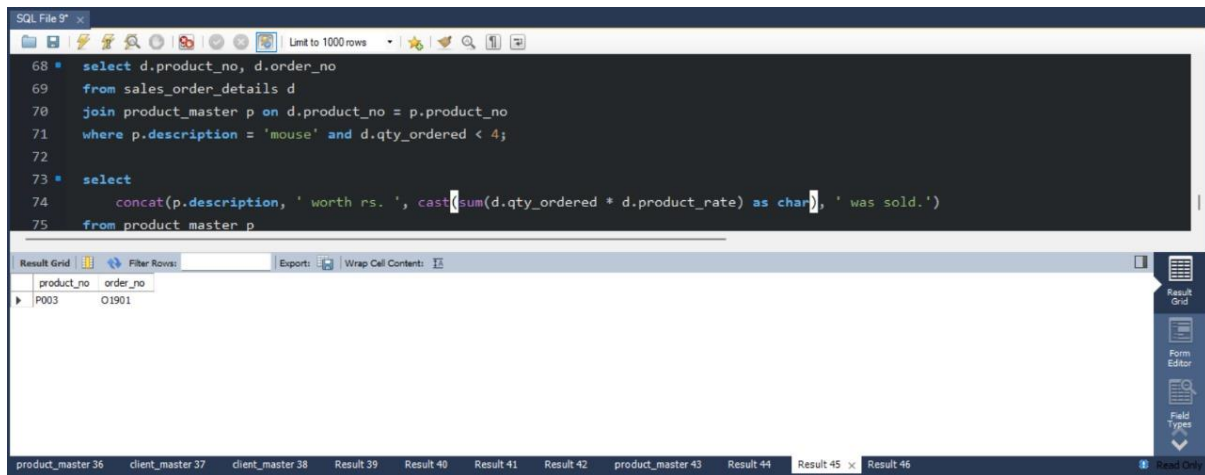
2



3



4



Q:- Queries on Constructing Sentences with data:

1) Print information from product-master, sales_order_detail tables in the following format for all

records:-

{description} Worth Rs. {total sales for the product} was sold.

A=> Query:-

select

concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')

from product_master p

join sales_order_details d on p.product_no = d.product_no

group by p.description;

Screenshot:-

SQL File 9*

```

68 * select d.product_no, d.order_no
69 from sales_order_details d
70 join product_master p on d.product_no = p.product_no
71 where p.description = 'mouse' and d.qty_ordered < 4;
72
73 * select
74 concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')
75 from product_master p

```

Result Grid

concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.')
Floppies worth rs. 35100.00 was sold.
Monitor worth rs. 26250.00 was sold.
Mouse worth rs. 14700.00 was sold.
Keyboards worth rs. 13650.00 was sold.
Cd Drive worth rs. 2100.00 was sold.
1.44 Drive worth rs. 10500.00 was sold.

product_master 36 client_master 37 client_master 38 Result 39 Result 40 Result 41 Result 42 product_master 43 Result 44 Result 45 Result 46 x

Action logs:-

#	Time	Action	Message	Duration / Fetch
164	10:28:25	use bda_23162121021	0 row(s) affected	0.000 sec
165	10:28:25	select p.product_no, p.description from product_master p where p.product_no not in (select product_no fr...	0 row(s) returned	0.000 sec / 0.000 sec
166	10:28:25	select c.name, c.city, c.pincode from client_master c where c.client_no = (select client_no from sales_ord...	1 row(s) returned	0.000 sec / 0.000 sec
167	10:28:25	select c.client_no, c.name from client_master c where c.client_no in (select client_no from sales_order_d...	6 row(s) returned	0.000 sec / 0.000 sec
168	10:28:25	select p.description, sum(s.qty_ordered) as total_qty_sold from product_master p join sales_order_details s on p...	6 row(s) returned	0.000 sec / 0.000 sec
169	10:28:25	select p.description, sum(s.qty_ordered * s.product_rate) as total_value_sold from product_master p join sales_...	6 row(s) returned	0.015 sec / 0.000 sec
170	10:28:25	select sum(s.Billed_yn) as total_billed_orders from sales_order s where s.order_date between '01-jan-2023' and ...	1 row(s) returned	0.000 sec / 0.000 sec
171	10:28:25	select p.product_no, p.description from product_master p join sales_order_details s on p.product_no = s produc...	5 row(s) returned	0.000 sec / 0.000 sec
172	10:28:25	select p.product_no, p.description from product_master p where p.product_no in (select product_no from ...	0 row(s) returned	0.000 sec / 0.000 sec
173	10:28:25	select c.name from client_master c join sales_order o on c.client_no = o.client_no join sales_order_details d on ...	1 row(s) returned	0.016 sec / 0.000 sec
174	10:28:25	select d.product_no, d.order_no from sales_order_details d join product_master p on d.product_no = p product...	1 row(s) returned	0.000 sec / 0.000 sec
175	10:28:25	select concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_price) as char), ' was sold.) from...	Error Code: 1054. Unknown column 'd.product_price' in field list	0.000 sec
176	10:28:55	use bda_23162121021	0 row(s) affected	0.000 sec
177	10:28:55	select p.product_no, p.description from product_master p where p.product_no not in (select product_no fr...	0 row(s) returned	0.000 sec / 0.000 sec
178	10:28:55	select c.name, c.city, c.pincode from client_master c where c.client_no = (select client_no from sales_ord...	1 row(s) returned	0.000 sec / 0.000 sec
179	10:28:55	select c.client_no, c.name from client_master c where c.client_no in (select client_no from sales_order_d...	6 row(s) returned	0.000 sec / 0.000 sec
180	10:28:55	select p.description, sum(s.qty_ordered) as total_qty_sold from product_master p join sales_order_details s on p...	6 row(s) returned	0.000 sec / 0.000 sec
181	10:28:55	select p.description, sum(s.qty_ordered * s.product_rate) as total_value_sold from product_master p join sales_...	6 row(s) returned	0.000 sec / 0.000 sec
182	10:28:55	select sum(s.Billed_yn) as total_billed_orders from sales_order s where s.order_date between '01-jan-2023' and ...	1 row(s) returned	0.000 sec / 0.000 sec
183	10:28:55	select p.product_no, p.description from product_master p join sales_order_details s on p.product_no = s produc...	5 row(s) returned	0.015 sec / 0.000 sec
184	10:28:55	select p.product_no, p.description from product_master p where p.product_no in (select product_no from ...	0 row(s) returned	0.000 sec / 0.000 sec
185	10:28:55	select c.name from client_master c join sales_order o on c.client_no = o.client_no join sales_order_details d on ...	1 row(s) returned	0.000 sec / 0.000 sec
186	10:28:55	select d.product_no, d.order_no from sales_order_details d join product_master p on d.product_no = p product...	1 row(s) returned	0.000 sec / 0.000 sec
187	10:28:55	select concat(p.description, ' worth rs. ', cast(sum(d.qty_ordered * d.product_rate) as char), ' was sold.) from ...	6 row(s) returned	0.000 sec / 0.000 sec