

Institute of Computer And Technology
B.Tech – CSE(BDA)

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Sem:-2

Sub:-Database Management

Enrollment No.:-23162121021

Prac:-1

Date:-29 /7/2024

Practical 1

1. Create database in mysql with your branch name and enrollment number.

Query:

```
create table Client_master (Client_no varchar(10), Name varchar(20), City varchar(20), Pincode int, State varchar(20), Bal_due int);
```

Screenshots:-

The first screenshot shows the MySQL Workbench interface with the 'Database' dropdown menu open, displaying a list of databases including 'bda_23162121021'. The second screenshot shows the SQL editor with the following queries:

```
1 * create database BDA_23162121021;
2 * show databases;
3 * use BDA_23162121021;
4 * create table Client_master (Client_no varchar(10), Name varchar(20), City varchar(20), Pincode int, State varchar(20), Bal_due int);
5 * use practical_1;
6 * truncate Client_master;
7 * desc Client_master;
8 * insert into Client_master values('C001', 'Ivan', 'Bombay', 400054, 'Maharashtra', 15000);
```

The 'Result Grid' shows the output of the queries, including the list of databases and the table structure of 'Client_master'. The 'Output' pane shows the execution details of the queries, including the time taken and the number of rows affected.

2. Create table client_master.

Query:

create table Client_master (Client_no varchar(10), Name varchar(20), City varchar(20), Pincode int, State varchar(20), Bal_due int);

Screenshots:-

The screenshot displays a database management interface with a SQL editor and a results grid. The SQL editor contains the following queries:

```
1 * create database BDA_23162121021;
2 * show databases;
3 * use BDA_23162121021;
4 * create table Client_master (Client_no varchar(10), Name varchar(20), City varchar(20), Pincode int, State varchar(20), Bal_due int);
5 * desc Client_master;
6 * insert into Client_master values('C001', 'Ivan', 'Bombay', 400054, 'Maharashtra', 15000);
7 * insert into Client_master values('C002', 'Vandana', 'Madras', 780001, 'Tamil Nadu', 0);
8 * insert into Client_master values('C003', 'Pramada', 'Bombay', 400057, 'Maharashtra', 5000);
```

The results grid shows the data inserted into the Client_master table:

Client_no	Name	City	Pincode	State	Bal_due
C001	Ivan	Bombay	400054	Maharashtra	15000
C002	Vandana	Madras	780001	Tamil Nadu	0
C003	Pramada	Bombay	400057	Maharashtra	5000
C004	Basu	Bombay	400056	Maharashtra	0
C005	Ravi	Delhi	100001	Gujarat	0
C006	Rukmani	Bombay	400050	Maharashtra	2000

The bottom section of the screenshot shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
6	21:50:50	insert into Client_master values('C001', 'Ivan', 'Bombay', 400054, 'Maharashtra', 15000)	1 row(s) affected	0.016 sec
7	21:50:50	insert into Client_master values('C002', 'Vandana', 'Madras', 780001, 'Tamil Nadu', 0)	1 row(s) affected	0.000 sec
8	21:50:50	insert into Client_master values('C003', 'Pramada', 'Bombay', 400057, 'Maharashtra', 5000)	1 row(s) affected	0.000 sec
9	21:50:50	insert into Client_master values('C004', 'Basu', 'Bombay', 400056, 'Maharashtra', 0)	1 row(s) affected	0.015 sec
10	21:50:50	insert into Client_master values('C005', 'Ravi', 'Delhi', 100001, 'Gujarat', 0)	1 row(s) affected	0.000 sec
11	21:50:50	insert into Client_master values('C006', 'Rukmani', 'Bombay', 400050, 'Maharashtra', 2000)	1 row(s) affected	0.000 sec
12	21:50:50	select * from Client_master LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec

3. Create table product_master.

Query:

create table Product_master (Product_no varchar(10), Description varchar(20), P_percent varchar(10), U_measure varchar(20), Qty_on_hand int, Reorder_lvl int, sell_price int, Cost_price int);

Screenshot:-

The screenshot displays a database management interface with multiple tabs at the top: 'prac_1_A', 'prac_1_B*', 'prac_1_C', and 'prac_2'. The 'prac_1_B*' tab is active, showing a SQL script with 8 lines of code. Below the script, a 'Result Grid' shows the output of the queries. The first query is a 'CREATE TABLE' statement, and the subsequent seven are 'INSERT INTO' statements. The 'Result Grid' displays the results of these insertions, showing columns: Product_no, Description, P_percent, U_measure, Qty_on_hand, Reorder_lvl, sell_price, and Cost_price. The data rows are as follows:

Product_no	Description	P_percent	U_measure	Qty_on_hand	Reorder_lvl	sell_price	Cost_price
P001	Floppies	5	Piece	100	20	525	500
P002	Monitor	6	Piece	10	3	12000	11280
P003	Mouse	5	Piece	20	5	1050	1000
P004	Floppies	5	Piece	100	20	525	1000
P005	Keyboards	2	Piece	10	3	3150	500
P006	Cd Drive	2.5	Piece	10	3	5250	3050
P007	1.44 Drive	4	Piece	10	3	8400	8000
P008	This	4	Piece	0	3	8400	8000

Below the 'Result Grid', there is an 'Output' section showing the 'Action Output' of the queries. It lists the execution time, the action performed, the message, and the duration. The actions are: 'insert into Product_master values(P001, 'Floppies', 5, 'Piece', 100, 20, 525, 500);', 'insert into Product_master values(P002, 'Monitor', 6, 'Piece', 10, 3, 12000, 11280);', 'insert into Product_master values(P003, 'Mouse', 5, 'Piece', 20, 5, 1050, 1000);', 'insert into Product_master values(P004, 'Floppies', 5, 'Piece', 100, 20, 525, 1000);', 'insert into Product_master values(P005, 'Keyboards', 2, 'Piece', 10, 3, 3150, 500);', 'insert into Product_master values(P006, 'Cd Drive', 2.5, 'Piece', 10, 3, 5250, 3050);', 'insert into Product_master values(P007, '1.44 Drive', 4, 'Piece', 10, 3, 8400, 8000);', and 'insert into Product_master values(P008, 'This', 4, 'Piece', 0, 3, 8400, 8000);'. The final action is 'select * from Product_master LIMIT 0, 1000', which returned 8 rows.

4. Create table Salesman_master.

Query:

create table Salesman_master (S_no varchar(10), S_name varchar(20), City varchar(20), Pin int, State varchar(20), Sal_Amt int, Tgt_to_get int, Ytd_sales int, Reamrks varchar(20));

Screenshot:-

The screenshot displays a database management interface with a SQL editor and a results grid. The SQL editor contains the following queries:

```
2 * create table Salesman_master (S_no varchar(10), S_name varchar(20), City varchar(20), Pin int, State varchar(20), Sal_Amt int, Tgt_to_get int, Ytd_sales int, Reamrks varchar(20));
3 * desc Salesman_master;
4 * insert into Salesman_master values('S001', 'Kiran', 'Bombay', 400002, 'Maharashtra', 3000, 100, 50, 'Excellent');
5 * insert into Salesman_master values('S002', 'Manish', 'Bombay', 400001, 'Maharashtra', 3000, 200, 100, 'Good');
6 * insert into Salesman_master values('S003', 'Ravi', 'Bombay', 400032, 'Maharashtra', 3000, 200, 100, 'Average');
7 * insert into Salesman_master values('S004', 'Ashish', 'Bombay', 400044, 'Maharashtra', 3500, 200, 150, 'Good');
8
9 * select * from Salesman_master;
```

The results grid shows the output of the SQL queries:

S_no	S_name	City	Pin	State	Sal_Amt	Tgt_to_get	Ytd_sales	Reamrks
S001	Kiran	Bombay	400002	Maharashtra	3000	100	50	Excellent
S002	Manish	Bombay	400001	Maharashtra	3000	200	100	Good
S003	Ravi	Bombay	400032	Maharashtra	3000	200	100	Average
S004	Ashish	Bombay	400044	Maharashtra	3500	200	150	Good


The bottom section of the screenshot shows the output of the SQL queries, including the creation of the table, the description of the table, and the insertion of data. The output is displayed in a table with columns: #, Time, Action, Message, and Duration / Fetch.

#	Time	Action	Message	Duration / Fetch
28	21:55:13	create table Salesman_master (S_no varchar(10), S_name varchar(20), City varchar(20), Pin int, State varchar(20), Sal_Amt int, Tgt_to_get int, Ytd_sales int, Reamrks varchar(20));	0 row(s) affected	0.031 sec
29	21:55:13	desc Salesman_master	9 row(s) returned	0.000 sec / 0.000 sec
30	21:55:13	insert into Salesman_master values('S001', 'Kiran', 'Bombay', 400002, 'Maharashtra', 3000, 100, 50, 'Excellent');	1 row(s) affected	0.000 sec
31	21:55:13	insert into Salesman_master values('S002', 'Manish', 'Bombay', 400001, 'Maharashtra', 3000, 200, 100, 'Good');	1 row(s) affected	0.000 sec
32	21:55:13	insert into Salesman_master values('S003', 'Ravi', 'Bombay', 400032, 'Maharashtra', 3000, 200, 100, 'Average');	1 row(s) affected	0.000 sec
33	21:55:13	insert into Salesman_master values('S004', 'Ashish', 'Bombay', 400044, 'Maharashtra', 3500, 200, 150, 'Good');	1 row(s) affected	0.000 sec
34	21:55:13	select * from Salesman_master LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

5. Describe structure for client_master table.
query :

desc table client_master;

Screenshot:-



The screenshot shows a database management tool interface. At the top, there's a toolbar with 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. Below this is a table with columns: Field, Type, Null, Key, Default, and Extra. The table lists the structure of the client_master table.

Field	Type	Null	Key	Default	Extra
Client_no	varchar(10)	YES		NULL	
Name	varchar(20)	YES		NULL	
City	varchar(20)	YES		NULL	
Pincode	int	YES		NULL	
State	varchar(20)	YES		NULL	
Bal_due	int	YES		NULL	

Result 1 x Read Only

6. Describe structure for product_master table. Query: desc table product_master;

Screenshot:-



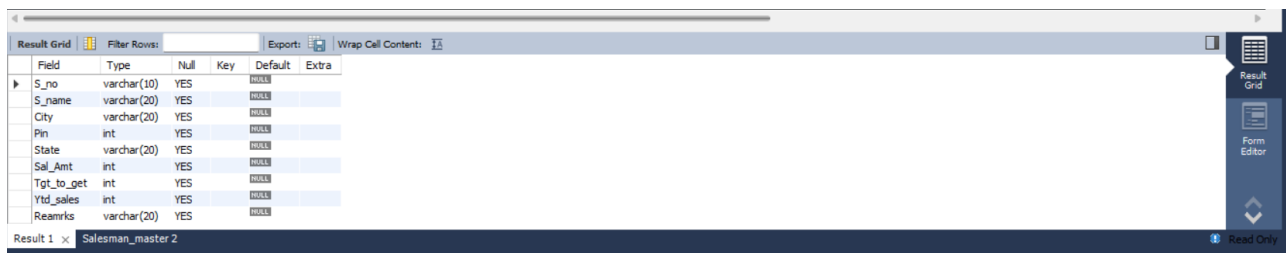
The screenshot shows a database management tool interface. At the top, there's a toolbar with 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. Below this is a table with columns: Field, Type, Null, Key, Default, and Extra. The table lists the structure of the product_master table.

Field	Type	Null	Key	Default	Extra
Product_no	varchar(10)	YES		NULL	
Description	varchar(20)	YES		NULL	
P_percent	varchar(10)	YES		NULL	
U_measure	varchar(20)	YES		NULL	
Qty_on_hand	int	YES		NULL	
Reorder_lvl	int	YES		NULL	
sell_price	int	YES		NULL	
Cost_price	int	YES		NULL	

Result 2 x Product_master 3 Read Only

7. Describe structure for salesman_master table. Query: desc table salesman_master;

Screenshot:-



The screenshot shows a database management tool interface. At the top, there's a toolbar with 'Result Grid', 'Filter Rows', 'Export', and 'Wrap Cell Content'. Below this is a table with columns: Field, Type, Null, Key, Default, and Extra. The table lists the structure of the salesman_master table.

Field	Type	Null	Key	Default	Extra
S_no	varchar(10)	YES		NULL	
S_name	varchar(20)	YES		NULL	
City	varchar(20)	YES		NULL	
Pin	int	YES		NULL	
State	varchar(20)	YES		NULL	
Sal_Amt	int	YES		NULL	
Tgt_to_get	int	YES		NULL	
Ytd_sales	int	YES		NULL	
Reamrks	varchar(20)	YES		NULL	

Result 1 x Salesman_master 2 Read Only

8. Insert records in client_master table.

Query:

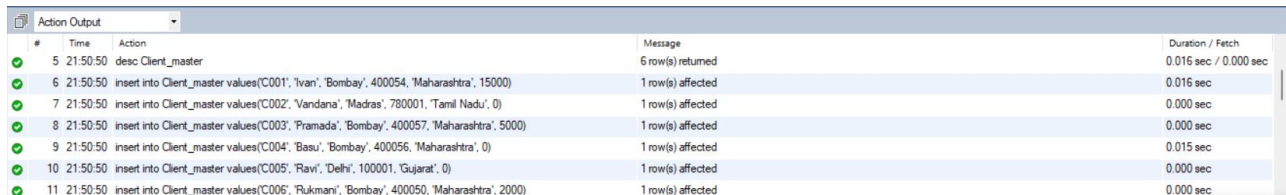
```
insert into Client_master values('C001', 'Ivan', 'Bombay', 400054,
'Maharashtra', 15000);
insert into Client_master values('C002', 'Vandana', 'Madras', 780001, 'Tamil
Nadu', 0);
insert into Client_master values('C003', 'Pramada', 'Bombay', 400057,
'Maharashtra', 5000);
insert into Client_master values('C004', 'Basu', 'Bombay', 400056,
'Maharashtra', 0);
insert into Client_master values('C005', 'Ravi', 'Delhi', 100001, 'Gujarat', 0);
insert into Client_master values('C006', 'Rukmani', 'Bombay', 400050,
'Maharashtra', 2000);
```

Screenshot:-



The screenshot shows a database client window with a 'Result Grid' tab selected. The grid displays the contents of the 'Client_master' table. The columns are Client_no, Name, City, Pincode, State, and Bal_due. The data is as follows:

Client_no	Name	City	Pincode	State	Bal_due
C001	Ivan	Bombay	400054	Maharashtra	15000
C002	Vandana	Madras	780001	Tamil Nadu	0
C003	Pramada	Bombay	400057	Maharashtra	5000
C004	Basu	Bombay	400056	Maharashtra	0
C005	Ravi	Delhi	100001	Gujarat	0
C006	Rukmani	Bombay	400050	Maharashtra	2000



The screenshot shows the 'Action Output' window with a list of executed actions. Each row includes a status icon, a time stamp, the action performed, the message returned, and the duration.

#	Time	Action	Message	Duration / Fetch
5	21:50:50	desc Client_master	6 row(s) returned	0.016 sec / 0.000 sec
6	21:50:50	insert into Client_master values('C001', 'Ivan', 'Bombay', 400054, 'Maharashtra', 15000)	1 row(s) affected	0.016 sec
7	21:50:50	insert into Client_master values('C002', 'Vandana', 'Madras', 780001, 'Tamil Nadu', 0)	1 row(s) affected	0.000 sec
8	21:50:50	insert into Client_master values('C003', 'Pramada', 'Bombay', 400057, 'Maharashtra', 5000)	1 row(s) affected	0.000 sec
9	21:50:50	insert into Client_master values('C004', 'Basu', 'Bombay', 400056, 'Maharashtra', 0)	1 row(s) affected	0.015 sec
10	21:50:50	insert into Client_master values('C005', 'Ravi', 'Delhi', 100001, 'Gujarat', 0)	1 row(s) affected	0.000 sec
11	21:50:50	insert into Client_master values('C006', 'Rukmani', 'Bombay', 400050, 'Maharashtra', 2000)	1 row(s) affected	0.000 sec

9. Insert records in product_master table.

Query:

```
insert into Product_master values('P001', 'Floppies', 5, 'Piece', 100, 20, 525, 500);
```

```
insert into Product_master values('P002', 'Monitor', 6, 'Piece', 10, 3, 12000, 11280);
```

```
insert into Product_master values('P003', 'Mouse', 5, 'Piece', 20, 5, 1050, 1000);
```

```
insert into Product_master values('P004', 'Floppies', 5, 'Piece', 100, 20, 525, 1000);
```

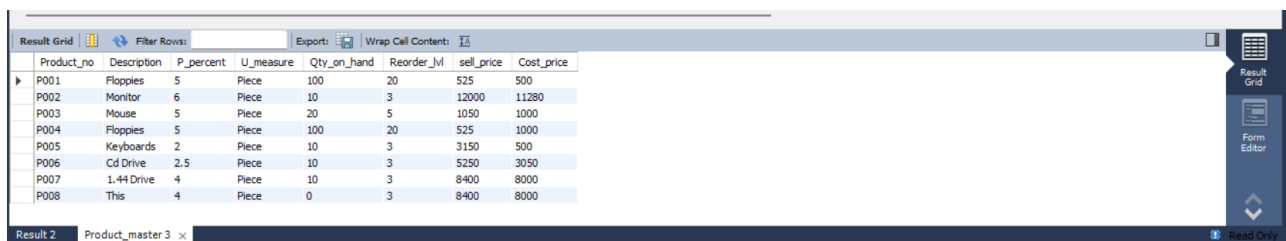
```
insert into Product_master values('P005', 'Keyboards', 2, 'Piece', 10, 3, 3150, 500);
```

```
insert into Product_master values('P006', 'Cd Drive', 2.5, 'Piece', 10, 3, 5250, 3050);
```

```
insert into Product_master values('P007', '1.44 Drive', 4, 'Piece', 10, 3, 8400, 8000);
```

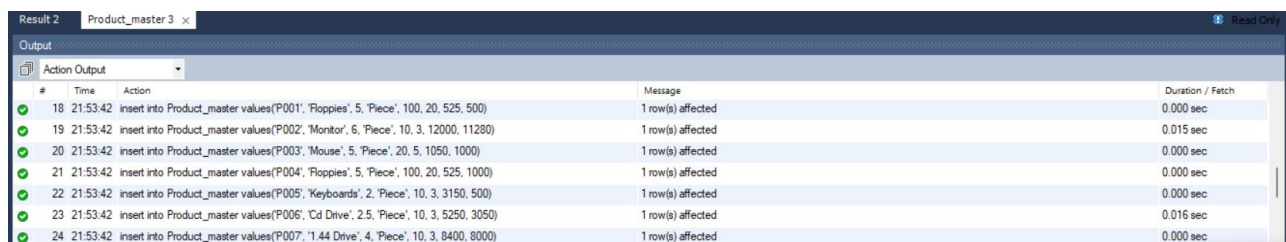
```
insert into Product_master values('P008', 'This', 4, 'Piece', 0, 3, 8400, 8000);
```

Screenshot:-



The screenshot shows a database application interface with a table named 'Product_master'. The table has 8 columns: Product_no, Description, P_percent, U_measure, Qty_on_hand, Reorder_lvl, sell_price, and Cost_price. The data is as follows:

Product_no	Description	P_percent	U_measure	Qty_on_hand	Reorder_lvl	sell_price	Cost_price
P001	Floppies	5	Piece	100	20	525	500
P002	Monitor	6	Piece	10	3	12000	11280
P003	Mouse	5	Piece	20	5	1050	1000
P004	Floppies	5	Piece	100	20	525	1000
P005	Keyboards	2	Piece	10	3	3150	500
P006	Cd Drive	2.5	Piece	10	3	5250	3050
P007	1.44 Drive	4	Piece	10	3	8400	8000
P008	This	4	Piece	0	3	8400	8000



The screenshot shows the 'Action Output' window of a database application. It displays 7 rows of insert statements and their execution details. The columns are: #, Time, Action, Message, and Duration / Fetch.

#	Time	Action	Message	Duration / Fetch
18	21:53:42	insert into Product_master values('P001', 'Floppies', 5, 'Piece', 100, 20, 525, 500)	1 row(s) affected	0.000 sec
19	21:53:42	insert into Product_master values('P002', 'Monitor', 6, 'Piece', 10, 3, 12000, 11280)	1 row(s) affected	0.015 sec
20	21:53:42	insert into Product_master values('P003', 'Mouse', 5, 'Piece', 20, 5, 1050, 1000)	1 row(s) affected	0.000 sec
21	21:53:42	insert into Product_master values('P004', 'Floppies', 5, 'Piece', 100, 20, 525, 1000)	1 row(s) affected	0.000 sec
22	21:53:42	insert into Product_master values('P005', 'Keyboards', 2, 'Piece', 10, 3, 3150, 500)	1 row(s) affected	0.000 sec
23	21:53:42	insert into Product_master values('P006', 'Cd Drive', 2.5, 'Piece', 10, 3, 5250, 3050)	1 row(s) affected	0.016 sec
24	21:53:42	insert into Product_master values('P007', '1.44 Drive', 4, 'Piece', 10, 3, 8400, 8000)	1 row(s) affected	0.000 sec

10. Insert records in salesman_master table.

Query :

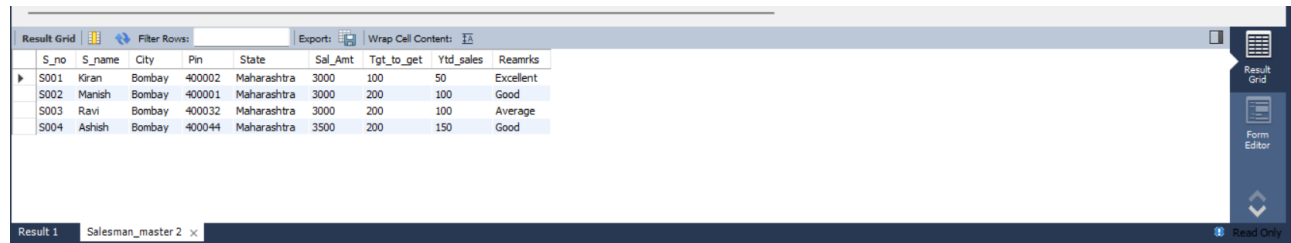
```
insert into Salesman_master values('S001', 'Kiran', 'Bombay', 400002, 'Maharashtra', 3000, 100, 50, 'Excellent');
```

```
insert into Salesman_master values('S002', 'Manish', 'Bombay', 400001, 'Maharashtra', 3000, 200, 100, 'Good');
```

```
insert into Salesman_master values('S003', 'Ravi', 'Bombay', 400032, 'Maharashtra', 3000, 200, 100, 'Average');
```

```
insert into Salesman_master values('S004', 'Ashish', 'Bombay', 400044, 'Maharashtra', 3500, 200, 150, 'Good');
```

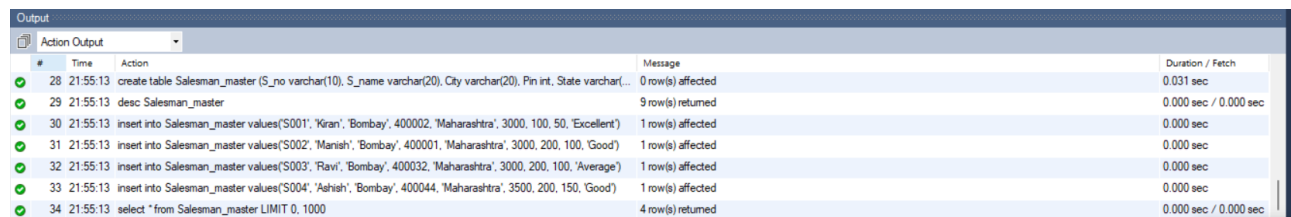
Screenshot:-



The screenshot shows a database application interface. At the top, there's a toolbar with options like 'Filter Rows', 'Export', and 'Wrap Cell Content'. Below this is a table with the following data:

S_no	S_name	City	Pin	State	Sal_Amt	Tgt_to_get	Ytd_sales	Remarks
S001	Kiran	Bombay	400002	Maharashtra	3000	100	50	Excellent
S002	Manish	Bombay	400001	Maharashtra	3000	200	100	Good
S003	Ravi	Bombay	400032	Maharashtra	3000	200	100	Average
S004	Ashish	Bombay	400044	Maharashtra	3500	200	150	Good

At the bottom, there's a status bar showing 'Result 1' and 'Salesman_master 2'.



The screenshot shows the 'Output' window of a database application. It contains a table with the following data:

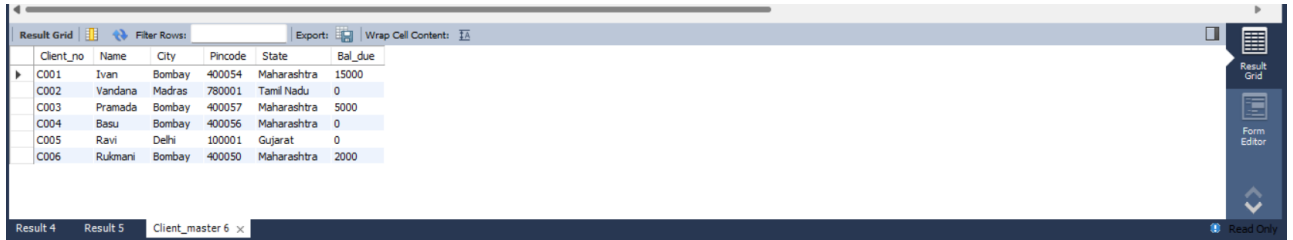
#	Time	Action	Message	Duration / Fetch
28	21:55:13	create table Salesman_master (S_no varchar(10), S_name varchar(20), City varchar(20), Pin int, State varchar(...	0 row(s) affected	0.031 sec
29	21:55:13	desc Salesman_master	9 row(s) returned	0.000 sec / 0.000 sec
30	21:55:13	insert into Salesman_master values('S001', 'Kiran', 'Bombay', 400002, 'Maharashtra', 3000, 100, 50, 'Excellent')	1 row(s) affected	0.000 sec
31	21:55:13	insert into Salesman_master values('S002', 'Manish', 'Bombay', 400001, 'Maharashtra', 3000, 200, 100, 'Good')	1 row(s) affected	0.000 sec
32	21:55:13	insert into Salesman_master values('S003', 'Ravi', 'Bombay', 400032, 'Maharashtra', 3000, 200, 100, 'Average')	1 row(s) affected	0.000 sec
33	21:55:13	insert into Salesman_master values('S004', 'Ashish', 'Bombay', 400044, 'Maharashtra', 3500, 200, 150, 'Good')	1 row(s) affected	0.000 sec
34	21:55:13	select * from Salesman_master LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

11. Retrieve all records for client_master table.

Query:-

```
select * from client_master;
```

Screenshot:-

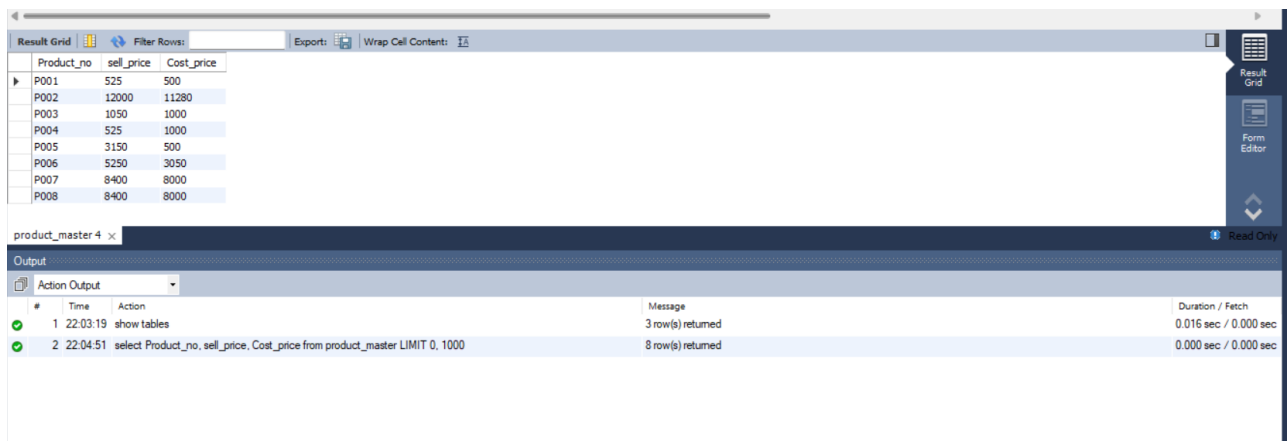


Client_no	Name	City	Pincode	State	Bal_due
C001	Ivan	Bombay	400054	Maharashtra	15000
C002	Vandana	Madras	780001	Tamil Nadu	0
C003	Pramada	Bombay	400057	Maharashtra	5000
C004	Basu	Bombay	400056	Maharashtra	0
C005	Ravi	Delhi	100001	Gujarat	0
C006	Rukmani	Bombay	400050	Maharashtra	2000

12. Retrieve product_no, sell_price and cost_price for product_master table

Query: select product_no, sell_price, cost_price from product_master

Screenshot:-



Product_no	sell_price	Cost_price
P001	525	500
P002	12000	11280
P003	1050	1000
P004	525	1000
P005	3150	500
P006	5250	3050
P007	8400	8000
P008	8400	8000

product_master 4

Output

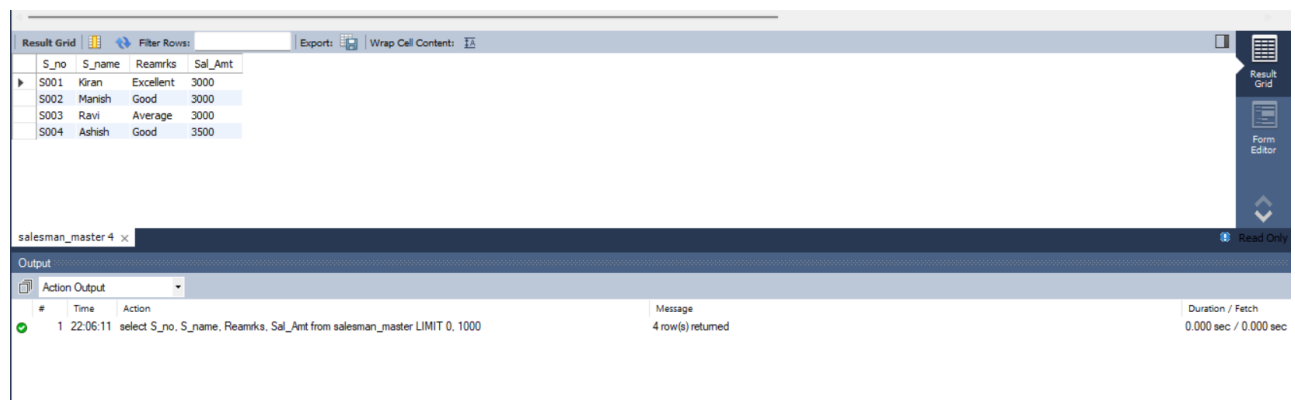
Action Output

#	Time	Action	Message	Duration / Fetch
1	22:03:19	show tables	3 row(s) returned	0.016 sec / 0.000 sec
2	22:04:51	select Product_no, sell_price, Cost_price from product_master LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

13. Retrieve s_no, s_name, remarks and sal_amt for salesman_master table.

Query: select s_no, s_name, remarks, sal_amt from salesman_master;

Screenshot:-



S_no	S_name	Remarks	Sal_Amt
S001	Kiran	Excellent	3000
S002	Manish	Good	3000
S003	Ravi	Average	3000
S004	Ashish	Good	3500

salesman_master 4

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	22:06:11	select S_no, S_name, Remarks, Sal_Amt from salesman_master LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

14. Display all tables for your database.
Query:

show tables;

Screenshot:-

