

MORE QUERIES ON EMPLOYEE DATABASE

```
show databases;
```

```
create database empl;
```

```
show databases;
```

```
use empl;
```

```
CREATE TABLE Department (
    dept_id INT PRIMARY KEY,
    dept_name VARCHAR(50),
    dept_location VARCHAR(50),
    manager_id INT
);
```

```
CREATE TABLE Employee (
    emp_id INT PRIMARY KEY,
    emp_name VARCHAR(50),
    job_role VARCHAR(50),
    salary DECIMAL(10,2),
    dept_id INT,
    manager_id INT,
    FOREIGN KEY (dept_id) REFERENCES Department(dept_id),
    FOREIGN KEY (manager_id) REFERENCES Employee(emp_id)
);
```

```
CREATE TABLE Project (
    proj_id INT PRIMARY KEY,
    proj_name VARCHAR(50),
    proj_location VARCHAR(50),
    dept_id INT,
    FOREIGN KEY (dept_id) REFERENCES Department(dept_id)
);
```

```
CREATE TABLE Works_On (
    emp_id INT,
    proj_id INT,
    PRIMARY KEY (emp_id, proj_id),
    FOREIGN KEY (emp_id) REFERENCES Employee(emp_id),
    FOREIGN KEY (proj_id) REFERENCES Project(proj_id)
);
```

```
CREATE TABLE Incentive (
    emp_id INT,
    incentive_date DATE,
    incentive_amount DECIMAL(10,2),
    FOREIGN KEY (emp_id) REFERENCES Employee(emp_id)
);
```

```
show tables;
```

```
INSERT INTO Department VALUES
```

```
(10, 'HR', 'Bengaluru', 1001),  
(20, 'IT', 'Hyderabad', 1002),  
(30, 'Finance', 'Mysuru', 1003),  
(40, 'Admin', 'Pune', 1004),  
(50, 'Marketing', 'Chennai', 1005);
```

```
select * from Department;
```

```
INSERT INTO Employee VALUES
```

```
(1001, 'Amit', 'Manager', 90000, 10, NULL),  
(1002, 'Ravi', 'Manager', 95000, 20, NULL),  
(1003, 'Sneha', 'Manager', 92000, 30, NULL),  
(1004, 'Kiran', 'Manager', 88000, 40, NULL),  
(1005, 'Meera', 'Manager', 97000, 50, NULL),  
(1010, 'Raj', 'Analyst', 55000, 20, 1002),  
(1011, 'Anu', 'Developer', 48000, 20, 1002),  
(1012, 'Vijay', 'HR Executive', 40000, 10, 1001),  
(1013, 'Priya', 'Accountant', 42000, 30, 1003),  
(1014, 'Suresh', 'Clerk', 30000, 40, 1004);
```

```
select * from Employee;
```

```
INSERT INTO Project VALUES
```

```
(201, 'Recruitment', 'Bengaluru', 10),
```

```
(202, 'ERP Upgrade', 'Hyderabad', 20),  
(203, 'Budget Planning', 'Mysuru', 30),  
(204, 'Office Setup', 'Pune', 40),  
(205, 'Ad Campaign', 'Chennai', 50);
```

```
select * from Project;
```

```
INSERT INTO Works_On VALUES  
(1010, 202),  
(1011, 202),  
(1012, 201),  
(1013, 203),  
(1014, 204);
```

```
select * from Works_On;
```

```
INSERT INTO Incentive VALUES  
(1010, '2019-02-10', 2000),  
(1011, '2019-02-12', 1500),  
(1012, '2019-02-15', 1000),  
(1013, '2019-02-18', 2500),  
(1001, '2019-02-20', 3000);
```

```
select * from Incentive;
```

```
SELECT DISTINCT w.emp_id
```

```
FROM Works_On w
JOIN Project p ON w.proj_id = p.proj_id
WHERE p.proj_location IN ('Bengaluru', 'Hyderabad', 'Mysuru');
```

```
SELECT e.emp_id
FROM Employee e
WHERE e.emp_id NOT IN (SELECT emp_id FROM Incentive);
```

```
SELECT e.emp_name, e.emp_id, d.dept_name, e.job_role,
d.dept_location, p.proj_location
FROM Employee e
JOIN Department d ON e.dept_id = d.dept_id
JOIN Works_On w ON e.emp_id = w.emp_id
JOIN Project p ON w.proj_id = p.proj_id
WHERE d.dept_location = p.proj_location;
```

```
SELECT m.emp_name AS manager_name, COUNT(e.emp_id) AS
total_employees
FROM Employee m
JOIN Employee e ON m.emp_id = e.manager_id
GROUP BY m.emp_name
HAVING COUNT(e.emp_id) =
SELECT MAX(cnt)
FROM (
    SELECT COUNT(emp_id) AS cnt
    FROM Employee
    WHERE manager_id IS NOT NULL
)
```

```
        GROUP BY manager_id  
    ) AS counts  
);
```

```
SELECT m.emp_name  
FROM Employee m  
JOIN Employee e ON m.emp_id = e.manager_id  
GROUP BY m.emp_name, m.salary  
HAVING m.salary > AVG(e.salary);
```

```
SELECT d.dept_name, m.emp_name AS top_manager  
FROM Department d  
JOIN Employee m ON d.manager_id = m.emp_id;
```

```
SELECT emp_id, incentive_amount  
FROM Incentive  
WHERE MONTH(incentive_date) = 2 AND YEAR(incentive_date) = 2019  
ORDER BY incentive_amount DESC  
LIMIT 1 OFFSET 1;
```

```
SELECT e.emp_name  
FROM Employee e  
JOIN Employee m ON e.manager_id = m.emp_id  
WHERE e.dept_id = m.dept_id;
```

MySQL Workbench

Local instance MySQL80

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PERFORMANCE

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Administration Schemas

No object selected

Object Info Session

Query 1

```

118 WHERE d.dept_location = p.proj_locations
119
120 • SELECT m.emp_name AS manager_name, COUNT(e.emp_id) AS total_employees
121   FROM Employee m
122   JOIN Employee e ON m.emp_id = e.manager_id
123   GROUP BY m.emp_name
124   HAVING COUNT(e.emp_id) = (
125     SELECT MAX(cnt)
126   )
  
```

Result Grid | Filter Rows: Export: Wrap Cell Content: □

manager_name	total_employees
Ravi	2

Result Grid

SQLAdditions | Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result 27 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
34	09:36:36	SELECT m.emp_name AS manager_name, COUNT(e.emp_id) AS total_employees FROM Employee m	1 row(s) returned	0.047 sec / 0.000 sec
35	09:37:11	SELECT m.emp_name FROM Employee m JOIN Employee e ON m.emp_id = e.manager_id ...	4 row(s) returned	0.031 sec / 0.000 sec
36	09:37:32	SELECT d.dept_name, m.emp_name AS top_manager FROM Department d JOIN Employee ...	5 row(s) returned	0.000 sec / 0.000 sec
37	09:37:54	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.031 sec / 0.000 sec
38	09:38:22	SELECT e.emp_name FROM Employee e JOIN Employee m ON e.manager_id = m.emp_id ...	5 row(s) returned	0.015 sec / 0.000 sec
39	09:40:48	SELECT m.emp_name AS manager_name, COUNT(e.emp_id) AS total_employees FROM Employee m	1 row(s) returned	0.000 sec / 0.000 sec
40	09:41:29	SELECT m.emp_name FROM Employee m JOIN Employee e ON m.emp_id = e.manager_id ...	4 row(s) returned	0.000 sec / 0.000 sec

Read Only Context Help Snippets

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No object selected

Object Info Session

Query 1

```

133
134 • SELECT m.emp_name
135   FROM Employee m
136   JOIN Employee e ON m.emp_id = e.manager_id
137   GROUP BY m.emp_name, m.salary
138   HAVING m.salary > AVG(e.salary));
  
```

Result Grid | Filter Rows: Export: Wrap Cell Content: □

emp_name
Ravi
Amit
Sneha
Kiran

Result Grid

SQLAdditions | Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result 28 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
35	09:37:11	SELECT m.emp_name FROM Employee m JOIN Employee e ON m.emp_id = e.manager_id ...	4 row(s) returned	0.031 sec / 0.000 sec
36	09:37:32	SELECT d.dept_name, m.emp_name AS top_manager FROM Department d JOIN Employee ...	5 row(s) returned	0.000 sec / 0.000 sec
37	09:37:54	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.031 sec / 0.000 sec
38	09:38:22	SELECT e.emp_name FROM Employee e JOIN Employee m ON e.manager_id = m.emp_id ...	5 row(s) returned	0.015 sec / 0.000 sec
39	09:40:48	SELECT m.emp_name AS manager_name, COUNT(e.emp_id) AS total_employees FROM Employee m	1 row(s) returned	0.000 sec / 0.000 sec
40	09:41:29	SELECT m.emp_name FROM Employee m JOIN Employee e ON m.emp_id = e.manager_id ...	4 row(s) returned	0.000 sec / 0.000 sec

Read Only Context Help Snippets

MySQL Workbench

Local instance MySQL80

Query 1

```

136 JOIN Employee e ON m.emp_id = e.manager_id
137 GROUP BY emp_name\$\$visual\$\$script or everything, if there is no selection
138 HAVING m.salary > AVG(e.salary);
139
140 • SELECT d.dept_name, m.emp_name AS top_manager
141 FROM Department d
142 JOIN Employee m ON d.manager_id = m.emp_id;
143
144 • SELECT emp_id, incentive_amount

```

Result Grid

dept_name	top_manager
HR	Amit
IT	Ravi
Finance	Sneha
Admin	Kiran
Marketing	Meera

Result 29

No object selected

Action Output

#	Time	Action	Message	Duration / Fetch
36	09:37:32	SELECT d.dept_name, m.emp_name AS top_manager FROM Department d JOIN Employee ...	5 row(s) returned	0.000 sec / 0.000 sec
37	09:37:54	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.031 sec / 0.000 sec
38	09:38:22	SELECT e.emp_name FROM Employee e JOIN Employee m ON e.manager_id = m.emp_id ...	5 row(s) returned	0.015 sec / 0.000 sec
39	09:40:48	SELECT m.emp_name AS manager_name, COUNT(e.emp_id) AS total_employees FROM E ...	1 row(s) returned	0.000 sec / 0.000 sec
40	09:41:29	SELECT m.emp_name FROM Employee m JOIN Employee e ON m.emp_id = e.manager_id ...	4 row(s) returned	0.000 sec / 0.000 sec
41	09:42:47	SELECT d.dept_name, m.emp_name AS top_manager FROM Department d JOIN Employee ...	5 row(s) returned	0.000 sec / 0.000 sec
42	09:43:44	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80

Query 1

```

142 JOIN Employee m ON d.manager_id = m.emp_id;
143
144 • SELECT emp_id, incentive_amount
145 FROM Incentive
146 WHERE MONTH(incentive_date) = 2 AND YEAR(incentive_date) = 2019
147 ORDER BY incentive_amount DESC
148 LIMIT 1 OFFSET 1;
149
150 • SELECT emp_name

```

Result Grid

emp_id	incentive_amount
1013	2500.00

Incentive 30

No object selected

Action Output

#	Time	Action	Message	Duration / Fetch
37	09:37:54	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.031 sec / 0.000 sec
38	09:38:22	SELECT e.emp_name FROM Employee e JOIN Employee m ON e.manager_id = m.emp_id ...	5 row(s) returned	0.015 sec / 0.000 sec
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41	09:42:47	SELECT d.dept_name, m.emp_name AS top_manager FROM Department d JOIN Employee ...	5 row(s) returned	0.000 sec / 0.000 sec
42	09:43:44	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

Local instance MySQL80 x

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No object selected

Object Info Session

Query 1 x

```
148 LIMIT 1 OFFSET 1;
149
150 • SELECT e.emp_name
151   FROM Employee e
152   JOIN Employee m ON e.manager_id = m.emp_id
153   WHERE e.dept_id = m.dept_id;
154
155
156
```

Result Grid | Filter Rows: Export: Wrap Cell Contents: Result Grid

emp_name
Raj
Anu
Vijay
Priva
Suresh

Result 31 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
38	09:38:22	SELECT e.emp_name FROM Employee e JOIN Employee m ON e.manager_id = m.emp_id ...	5 row(s) returned	0.015 sec / 0.000 sec
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41	09:42:47	SELECT d.dept_name, m.emp_name AS top_manager FROM Department d JOIN Employee m ...	5 row(s) returned	0.000 sec / 0.000 sec
42	09:43:44	SELECT emp_id, incentive_amount FROM Incentive WHERE MONTH(incentive_date) = 2 ...	1 row(s) returned	0.000 sec / 0.000 sec
43	09:45:04	SELECT e.emp_name FROM Employee e JOIN Employee m ON e.manager_id = m.emp_id ...	5 row(s) returned	0.000 sec / 0.000 sec

SQLAdditions SQL Editor Jump to

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