

## Dumping tables

```
Command Prompt
ows [Version 10.0.26200.7840]
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tem32>mysqldump -u phoenix -p employee employees > employees_backup.sql
not recognized as an internal or external command,
am or batch file.

tem32>cd "C:\Program Files\MariaDB 12.1\bin"

es\MariaDB 12.1\bin>mysqldump -u phoenix -p employee employees > employees_backup.sql
: *****

es\MariaDB 12.1\bin>mysqldump -u phoenix -p employee departments > departments_backup.sql
: *****

es\MariaDB 12.1\bin>
```

## Sourcing the files

```
MySQL Client (MariaDB 12.1)
Server version: 12.1.2-MariaDB MariaDB Server
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> Create DATABASE employee
-> ;
Query OK, 1 row affected (0.006 sec)

MariaDB [(none)]> use employee
Database changed
MariaDB [employee]> source "C:\\Users\\PHOENIX\\OneDrive\\Documents\\SCHOOL\\
\\principles\\EmployeesDatabase.sql";
ERROR: Failed to open file 'C:\\Users\\PHOENIX\\OneDrive\\Documents\\SCHOOL\\pri
nciples\\EmployeesDatabase.sql', error: 13
MariaDB [employee]> source C:\\Users\\PHOENIX\\OneDrive\\Documents\\SCHOOL\\
principles\\EmployeesDatabase.sql;
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
Database changed
Query OK, 0 rows affected (0.045 sec)

Query OK, 0 rows affected (0.013 sec)

Query OK, 7 rows affected (0.072 sec)
Records: 7 Duplicates: 0 Warnings: 0

Query OK, 7 rows affected (0.004 sec)
Records: 7 Duplicates: 0 Warnings: 0

Query OK, 19 rows affected (0.001 sec)
Records: 19 Duplicates: 0 Warnings: 0

MariaDB [employee]> |
```

## SOURCING EMPLOYEE DUMP

```
nciples\employee_dump_20260223.sql"', error: 13
MariaDB [employee]> SOURCE C:\\Users\\PHOENIX\\OneDrive\\Documents\\SCHOOL\\
principles\\employee_dump_20260223.sql;
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
ERROR: Unknown command '\\'.
Sandbox mode.
Query OK, 0 rows affected (0.001 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.001 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected, 1 warning (0.000 sec)

Query OK, 0 rows affected (0.011 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.000 sec)

Query OK, 0 rows affected (0.016 sec)

Query OK, 0 rows affected (0.000 sec)
```

## LIST EMPLOYEES AND THEIR MANAGERS

```
MariaDB [employee]> SELECT employees.name AS employee, employees.name AS manager FROM employees LEFT JOIN manager ON employee.manager_id=manager.id;
ERROR 1146 (42S02): Table 'employee.manager' doesn't exist
```

```
MariaDB [employee]> SELECT employee.name, manager.name FROM employees AS employee LEFT JOIN employee AS manager ON employee.manager_id=manager.id;
```

```
ERROR 1146 (42S02): Table 'employee.employee' doesn't exist
```

```
MariaDB [employee]> SELECT e1.name AS employee, e2.name AS manager FROM employees e1 LEFT JOIN employees e2 ON e1.manager_id=e2.id;
```

employee	manager
James	NULL
Maria	NULL
Robert	NULL
Emma	NULL
Liam	NULL
Olivia	NULL
Noah	NULL
Ava	NULL
William	NULL
Sophia	NULL
Ethan	NULL
Isabella	NULL
Charlotte	Emma
Ella	William
Scarlett	Olivia
Ava	Ethan
Scarlett	Sophia
Charlotte	Robert
Evelyn	Ava
Mia	Noah
Ava	Ethan
Ella	James
Logan	Emma
Evelyn	Emma
Scarlett	Ethan
Zoe	Noah
Mia	Isabella
Grace	Ethan
Olivia	James
Scarlett	William

## LIST DEPARTMENTS AND THEIR MANAGERS

```
MariaDB [employee]> SELECT DISTINCT d.department_name AS department, m.name  
AS manager FROM departments d JOIN employees m ON d.manager_id=m.id;
```

department	manager
Assembly	James
Quality Control	Maria
Machining	Robert
Logistics	Emma
Maintenance	Liam
R&D	Olivia
Procurement	Noah
Health & Safety	Ava
Packaging	William
Inventory	Sophia
Welding	Ethan
Plant Management	Isabella

```
12 rows in set (0.001 sec)
```

```
MariaDB [employee]> |
```

## LIST EMPLOYEES AND THEIR DEPARTMENTS

```
MySQL Client (MariaDB 12.1) x + v
+-----+-----+
176 rows in set (0.001 sec)

MariaDB [employee]> SELECT e.name AS employee, d.department_name AS department
FROM employees e LEFT JOIN departments d ON e.department_id=d.id;
+-----+-----+
| employee | department |
+-----+-----+
| James    | Assembly  |
| Maria    | Quality Control |
| Robert   | Machining |
| Emma     | Logistics |
| Liam     | Maintenance |
| Olivia   | R&D       |
| Noah     | Procurement |
| Ava      | Health & Safety |
| William  | Packaging  |
| Sophia   | Inventory |
| Ethan    | Welding   |
| Isabella | Plant Management |
| Charlotte | Machining |
| Ella     | Health & Safety |
| Scarlett | Health & Safety |
| Ava      | Procurement |
| Scarlett | R&D       |
| Charlotte | Inventory |
| Evelyn   | Machining |
| Mia      | NULL      |
| Ava      | R&D       |
| Ella     | Procurement |
| Logan    | Health & Safety |
| Evelyn   | R&D       |
| Scarlett | Assembly  |
| Zoe      | R&D       |
| Mia      | Plant Management |
| Grace    | Procurement |
| Olivia   | Assembly  |
| Scarlett | Quality Control |
| Mia      | Plant Management |
| Emma     | Assembly  |
| Ethan    | Assembly  |
```

## LIST EMPLOYEES WHO DON'T HAVE A MANAGER

144 rows in set (0.001 sec)

```
MariaDB [employee]> SELECT e.name AS employee FROM employees e WHERE e.manager_id IS NULL;
```

employee
James
Maria
Robert
Emma
Liam
Olivia
Noah
Ava
William
Sophia
Ethan
Isabella
Omar
Sherif

14 rows in set (0.001 sec)

```
MariaDB [employee]> |
```

## LIST EMPLOYEES WHO DON'T HAVE DEPARTMENT

```
MariaDB [employee]> SELECT e.name AS employee, d.department_name AS department_name
FROM employees e JOIN departments d ON e.department_id=d.id AND e.department_id IS NULL;
Empty set (0.004 sec)
```

```
MariaDB [employee]> SELECT e.name AS employee, d.department_name AS department_name
FROM employees e JOIN departments d ON e.department_id=0;
Empty set (0.001 sec)
```

```
MariaDB [employee]> SELECT e.name AS employee, d.department_name AS department_name
FROM employees e JOIN departments d ON e.department_id=0;
Empty set (0.001 sec)
```

```
MariaDB [employee]> SELECT e.name AS employee FROM employees e WHERE e.department_id IS NULL;
```

employee
Mia
Ava
Oliver
Omar
Aiden
Olivia
Logan
Mateo
Sherif
Sebastian
Ava
Charlotte

```
12 rows in set (0.004 sec)
```

```
MariaDB [employee]> |
```

LIST THE DEPARTMENTS AND THE NUMBER OF EMPLOYEES IN EACH INCLUDING NULL

```
MariaDB [employee]> SELECT d.department_name, COUNT(*) FROM departments d FULL JOIN employees e ON d.id=e.department_id GROUP BY department_id;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'FULL JOIN employees e ON d.id=e.department_id GROUP BY department_id' at line 1
MariaDB [employee]> SELECT d.department_name, COUNT(*) FROM departments d RIGHT JOIN employees e ON d.id=e.department_id GROUP BY department_id;
+-----+-----+
| department_name | COUNT(*) |
+-----+-----+
| NULL            | 12       |
| Assembly        | 16       |
| Quality Control | 12       |
| Machining        | 13       |
| Logistics        | 13       |
| Maintenance      | 10       |
| R&D              | 15       |
| Procurement      | 13       |
| Health & Safety  | 24       |
| Packaging         | 11       |
| Inventory        | 16       |
| Welding          | 17       |
| Plant Management | 16       |
+-----+-----+
13 rows in set (0.001 sec)

MariaDB [employee]> |
```

LIST MANAGER, SALARY, AND DEPARTMENT OF THE MANAGERS

```
+-----+-----+
13 rows in set (0.001 sec)

MariaDB [employee]> SELECT e.name AS manager, e.salary, d.department_name AS department FROM employees e JOIN departments d ON e.department_id=d.id AND e.manager_id IS NULL;
+-----+-----+-----+
| manager | salary | department |
+-----+-----+-----+
| James   | 95000 | Assembly   |
| Maria   | 92000 | Quality Control |
| Robert  | 88000 | Machining  |
| Emma    | 91000 | Logistics  |
| Liam    | 85000 | Maintenance |
| Olivia  | 110000 | R&D        |
| Noah    | 78000 | Procurement |
| Ava     | 82000 | Health & Safety |
| William | 75000 | Packaging   |
| Sophia  | 84000 | Inventory  |
| Ethan   | 89000 | Welding    |
| Isabella | 125000 | Plant Management |
+-----+-----+-----+
12 rows in set (0.002 sec)

MariaDB [employee]> |
```



SHOW THE EMPLOYEES WHO MAKE MORE THAN MANAGERS

2 rows in set (0.002 sec)

```
MariaDB [employee]> SELECT e.name AS employee, m.name AS manager FROM employees e, employees m WHERE e.manager_id=m.id AND e.salary>m.salary;
```

```
+-----+-----+  
| employee | manager |
```

```
+-----+-----+  
| Ella     | James   |  
| Scarlett | William |
```

```
+-----+-----+  
2 rows in set (0.002 sec)
```

```
MariaDB [employee]> |
```