

Dumping tables

```
: Command Prompt
Windows [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,
: command 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)  X  +  ▾  X
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\\\\principles\\\\EmployeesDatabase.sql"', error: 13
MariaDB [employee]> source C:\\\\Users\\\\PHOENIX\\\\OneDrive\\\\Documents\\\\SCHOOL\\\\principles\\\\EmployeesDatabase.sql;
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 '\\'.
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)
```

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  +  ▾
+-----+-----+
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 FROM employees e JOIN departments d ON e.department_id=d.id AND e.department_id=null;
Empty set (0.004 sec)

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

MariaDB [employee]> SELECT e.name AS employee, d.department_name AS department FROM employees e JOIN departments d ON e.department_id=NULL;
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]> |
```