

Matthew Curley

2/17/26

```
MariaDB [employee]> SELECT e.name AS employee_name, d.department_name FROM employees e INNER JOIN departments d ON e.department_id = d.id;
+-----+-----+
| employee_name | department_name |
+-----+-----+
| Charlie      | HR           |
| Frank        | HR           |
| Paul          | HR           |
| Wendy         | HR           |
| Alice         | Engineering  |
| Bob           | Engineering  |
| Jack           | Engineering  |
| Quincy        | Engineering  |
| Xander        | Engineering  |
| Grace          | Marketing    |
| Olivia         | Marketing    |
| Victor         | Marketing    |
| David          | Finance      |
| Emma           | Finance      |
| Rachel         | Finance      |
| Hank           | Sales         |
| Ivy            | Sales         |
| Zach           | Sales         |
| Karen          | IT           |
| Laura          | IT           |
| Tracy          | IT           |
| Mike           | Customer Support |
| Nina           | Customer Support |
| Uma            | Customer Support |
+-----+-----+
24 rows in set (0.010 sec)
```

1.

```
MariaDB [employee]> SELECT e.name AS employee_name, d.department_name FROM employees e LEFT JOIN departments d ON e.department_id = d.id;
+-----+-----+
| employee_name | department_name |
+-----+-----+
| Alice         | Engineering  |
| Bob           | Engineering  |
| Charlie       | HR           |
| David          | Finance      |
| Emma          | Finance      |
| Frank          | HR           |
| Grace          | Marketing    |
| Hank           | Sales         |
| Ivy            | Sales         |
| Jack           | Engineering  |
| Karen          | IT           |
| Laura          | IT           |
| Mike           | Customer Support |
| Nina           | Customer Support |
| Olivia         | Marketing    |
| Paul           | HR           |
| Quincy         | Engineering  |
| Rachel         | Finance      |
| Steve          | NULL         |
| Tracy          | IT           |
| Uma            | Customer Support |
| Victor         | Marketing    |
| Wendy          | HR           |
| Xander         | Engineering  |
| Yvonne         | NULL         |
| Zach           | Sales         |
+-----+-----+
26 rows in set (0.005 sec)
```

2.

```
MariaDB [employee]> SELECT d.department_name, e.name AS employee_name FROM departments d LEFT JOIN employees e ON d.id = e.department_id;
+-----+-----+
| department_name | employee_name |
+-----+-----+
| HR             | Charlie          |
| HR             | Frank            |
| HR             | Paul             |
| HR             | Wendy            |
| Engineering    | Alice             |
| Engineering    | Bob              |
| Engineering    | Jack              |
| Engineering    | Quincy            |
| Engineering    | Xander            |
| Marketing      | Grace             |
| Marketing      | Olivia            |
| Marketing      | Victor            |
| Finance         | David             |
| Finance         | Emma              |
| Finance         | Rachel            |
| Sales           | Hank              |
| Sales           | Ivy               |
| Sales           | Zach              |
| IT              | Karen             |
| IT              | Laura             |
| IT              | Tracy             |
| Customer Support | Mike             |
| Customer Support | Nina             |
| Customer Support | Uma              |
| IT SECURITY     | NULL             |
| QA              | NULL             |
+-----+-----+
26 rows in set (0.002 sec)
```

3.

```
MariaDB [employee]> SELECT e.name AS employee_name, m.name AS manager_name FROM employees e INNER JOIN employees m ON e.manager_id = m.id;
+-----+-----+
| employee_name | manager_name |
+-----+-----+
| Alice          | Jack             |
| Bob            | Jack             |
| David          | Emma             |
| Frank          | Charlie          |
| Ivy            | Hank             |
| Karen          | Laura            |
| Mike           | Nina             |
| Olivia          | Grace            |
| Paul            | Charlie          |
| Quincy          | Jack              |
| Rachel          | Emma             |
| Tracy          | Laura            |
| Uma            | Nina             |
| Victor          | Grace            |
| Wendy          | Charlie          |
| Xander          | Jack              |
| Zach            | Hank             |
+-----+-----+
17 rows in set (0.001 sec)
```

4.

```
MariaDB [employee]> SELECT e.name AS employee_name, d.department_name FROM employees e LEFT JOIN departments d ON e.department_id = d.id;
+-----+-----+
| employee_name | department_name |
+-----+-----+
| Alice          | Engineering      |
| Bob            | Engineering      |
| Charlie        | HR               |
| David          | Finance          |
| Emma           | Finance          |
| Frank          | HR               |
| Grace          | Marketing         |
| Hank           | Sales             |
| Ivy            | Sales             |
| Jack            | Engineering       |
| Karen          | IT               |
| Laura          | IT               |
| Mike           | Customer Support |
| Nina           | Customer Support |
| Olivia          | Marketing         |
| Paul            | HR               |
| Quincy          | Engineering       |
| Rachel          | Finance          |
| Steve           | NULL             |
| Tracy          | IT               |
| Uma            | Customer Support |
| Victor          | Marketing         |
| Wendy          | HR               |
| Xander          | Engineering       |
| Yvonne          | NULL             |
| Zach            | Sales             |
+-----+-----+
26 rows in set (0.001 sec)
```

5.

```
MariaDB [employee]> SELECT name, salary FROM employees WHERE salary = (SELECT MAX(salary) FROM employees);
+-----+-----+
| name | salary |
+-----+-----+
| Emma | 90000.00 |
+-----+-----+
1 row in set (0.007 sec)

6. MariaDB [employee]> SELECT e.name, d.department_name, e.salary FROM employees e LEFT JOIN departments d ON e.department_id = d.id WHERE e.salary = (SELECT MAX(salary) FROM employees);
+-----+-----+-----+
| name | department_name | salary |
+-----+-----+-----+
| Emma | Finance         | 90000.00 |
+-----+-----+
1 row in set (0.001 sec)

7.
```