Matthew Curley

2/24/26

1.

```
MariaDB [employee]> SELECT e.name AS employee_name, m.name AS manager_name FROM employees e JOIN employees m ON e.manager_id = m.id;
+---------------+--------------+
| employee_name | manager_name |
+---------------+--------------+
| 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      |
| Mia           | Ava          |
| Emma          | Olivia       |
| Ethan         | Ethan        |
| Logan         | Maria        |
| Abigail       | Emma         |
| Aiden         | Noah         |
| Ava           | Liam         |
| Charlotte     | James        |
| Mateo         | Sophia       |
| Charlotte     | Olivia       |
| Jackson       | Sophia       |
| Evelyn        | Ethan        |
| Joseph        | James        |
```

2.

```
MariaDB [employee]> SELECT d.department_name, e.name AS manager_name FROM departments d JOIN employees e ON d.manager_id = e.id;
+------------------+--------------+
| department_name  | manager_name |
+------------------+--------------+
| 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)
```

3.

```
MariaDB [employee]> SELECT e.name AS employee_name, d.department_name FROM employees e JOIN departments d ON e.department_id = d.id;
+---------------+-----------------+
| employee_name | department_name |
+---------------+-----------------+
| James         | Assembly        |
| Scarlett      | Assembly        |
| Olivia        | Assembly        |
| Emma          | Assembly        |
| Ethan         | Assembly        |
| Mateo         | Assembly        |
| Scarlett      | Assembly        |
| Aiden         | Assembly        |
| Aiden         | Assembly        |
| Aiden         | Assembly        |
| Emma          | Assembly        |
| Ethan         | Assembly        |
| Logan         | Assembly        |
| Oliver        | Assembly        |
| Lucas         | Assembly        |
| David         | Assembly        |
| Maria         | Quality Control |
| Scarlett      | Quality Control |
| Charlotte     | Quality Control |
| Evelyn        | Quality Control |
| Mason         | Quality Control |
| Ava           | Quality Control |
| Sophia        | Quality Control |
| Noah          | Quality Control |
| Abigail       | Quality Control |
| Elijah        | Quality Control |
| Grace         | Quality Control |
| Abigail       | Quality Control |
| Robert        | Machining       |
| Charlotte     | Machining       |
| Evelyn        | Machining       |
```

4.

```
MariaDB [employee]> SELECT name FROM employees WHERE manager_id IS NULL;
+----------+
| name     |
+----------+
| James    |
| Maria    |
| Robert   |
| Emma     |
| Liam     |
| Olivia   |
| Noah     |
| Ava      |
| William  |
| Sophia   |
| Ethan    |
| Isabella |
| Omar     |
| Sherif   |
+----------+
14 rows in set (0.004 sec)
```

```
MariaDB [employee]> SELECT name FROM employees WHERE department_id IS NULL;
+-----------+
| name      |
+-----------+
| Mia       |
| Ava       |
| Oliver    |
| Omar      |
| Aiden     |
| Olivia    |
| Logan     |
| Mateo     |
| Sherif    |
| Sebastian |
| Ava       |
| Charlotte |
+-----------+
12 rows in set (0.001 sec)
```

6.

```
MariaDB [employee]> SELECT d.department_name, COUNT(e.id) AS employee_count FROM departments d LEFT JOIN employees e ON e.department_id = d.id GROUP
 BY d.department_name UNION SELECT 'No Department' AS department_name, COUNT(*) FROM employees WHERE department_id IS NULL;
+-----------------+----------------+
| department_name | employee_count |
+-----------------+----------------+
| Assembly        |             16 |
| Health & Safety |             24 |
| Inventory       |             16 |
| Logistics       |             13 |
| Machining       |             13 |
| Maintenance     |             10 |
| Packaging       |             11 |
| Plant Management|             16 |
| Procurement     |             13 |
| Quality Control |             12 |
| R&D             |             15 |
| Welding         |             17 |
| No Department   |             12 |
+-----------------+----------------+
13 rows in set (0.005 sec)
```

7.

```
MariaDB [employee]> SELECT e.name, e.salary, d.department_name FROM employees e JOIN departments d ON e.department_id = d.id WHERE e.manager_id IS N
ULL AND e.department_id IS NOT NULL;
+----------+--------+------------------+
| name     | salary | department_name  |
+----------+--------+------------------+
| 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 (0.003 sec)
```

8.

```
MariaDB [employee]> SELECT e.name AS employee_name, e.salary AS employee_salary, m.name AS manager_name, m.salary AS manager_salary FROM employees e
 JOIN employees m ON e.manager_id = m.id WHERE e.salary > m.salary;
+---------------+-----------------+--------------+----------------+
| employee_name | employee_salary | manager_name | manager_salary |
+---------------+-----------------+--------------+----------------+
| Ella          |           97000 | James        |          95000 |
| Scarlett      |           77000 | William      |          75000 |
+---------------+-----------------+--------------+----------------+
2 rows in set (0.003 sec)
```