1.

```
MariaDB [employee]> select e1.name as Employee, e2.name as Manager from employees e1 inner join employees e2 where e1.manager_id = e2.id order by Manager;
+----------+----------+
| Employee | Manager  |
+----------+----------+
| Ella     | Ava      |
| Jackson  | Ava      |
| Evelyn   | Ava      |
| Ethan    | Ava      |
| Joseph   | Ava      |
| Amelia   | Ava      |
| Jackson  | Ava      |
| Lucas    | Ava      |
| Mia      | Ava      |
| Aiden    | Ava      |
| Scarlett | Ava      |
| Grace    | Ava      |
| Charlotte | Ava     |
| Jackson  | Ava      |
| Evelyn   | Ava      |
| Zoe      | Ava      |
| Oliver   | Ava      |
| Abigail  | Ava      |
| Mateo    | Ava      |
| Lucas    | Ava      |
| Joseph   | Ava      |
| Mia      | Emma     |
| Grace    | Emma     |
| Elijah   | Emma     |
| Aiden    | Emma     |
| Elijah   | Emma     |
| Emma     | Emma     |
| Ava      | Emma     |
```

2.

```
MariaDB [employee]> select d.department_name as DepartmentName, e.name as Manager from departments d inner join employees e on d.manager_id = e.id;
+-----------------+----------+
| DepartmentName  | 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)
```

3.

```
MariaDB [employee]> select e.name as Name, d.department_name as Department from employees e inner join departments d on e.department_id = d.id order by Department;
+----------+-----------------+
| Name     | Department      |
+----------+-----------------+
| 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        |
| Ava      | Health & Safety |
| Ella     | Health & Safety |
| Scarlett | Health & Safety |
| Logan    | Health & Safety |
| Logan    | Health & Safety |
| Joseph   | Health & Safety |
| Grace    | Health & Safety |
| Joseph   | Health & Safety |
| Emma     | Health & Safety |
| Zoe      | Health & Safety |
| Logan    | Health & Safety |
| Evelyn   | Health & Safety |
| Lucas    | Health & Safety |
| David    | Health & Safety |
| Ava      | Health & Safety |
| Zoe      | Health & Safety |
| Isabella | Health & Safety |
| Sophia   | Health & Safety |
| Logan    | Health & Safety |
| James    | Health & Safety |
| Oliver   | Health & Safety |
| Mia      | Health & Safety |
```

4.

```
MariaDB [employee]> select name as Name from employees where manager_id is null and id > 12;
+--------+
| Name   |
+--------+
| Omar   |
| Sherif |
+--------+
2 rows in set (0.001 sec)
```

5.

```
MariaDB [employee]> select name as 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 count(e.name) as EmployeeCount, d.department_name as Department from employees e left join departments d on e.department_id = d.id group by Department;
+--------------+-----------------+
| EmployeeCount | Department      |
+--------------+-----------------+
|           12 | NULL            |
|           16 | Assembly        |
|           24 | Health & Safety |
|           16 | Inventory       |
|           13 | Logistics       |
|           13 | Machining       |
|           10 | Maintenance     |
|           11 | Packaging       |
|           16 | Plant Management |
|           13 | Procurement     |
|           12 | Quality Control |
|           15 | R&D             |
|           17 | Welding         |
+--------------+-----------------+
13 rows in set (0.001 sec)
```

7.

```
MariaDB [employee]> select e.name, e.salary, d.department_name from (select * from employees where manager_id is null) e inner join departments d on e.department_id = d.id;
+----------+--------+-----------------+
| 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 (0.001 sec)
```

8.

```
MariaDB [employee]> select e.Employee from (select e1.name as Employee, e1.salary as employeeSalary, e2.salary as managerSalary from employees e1 inner join employees e2 on e1.manager_
id = e2.id order by employeeSalary) e where e.employeeSalary > e.managerSalary;
+----------+
| Employee |
+----------+
| Ella     |
| Scarlett |
+----------+
2 rows in set (0.001 sec)
```