1.

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
Tracy	IT
Uma	Customer Support

- Used an inner join when both department IDs matched up

2.

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

- Used left join from employees when department IDs matched up, and null when they didn't have one

3.

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

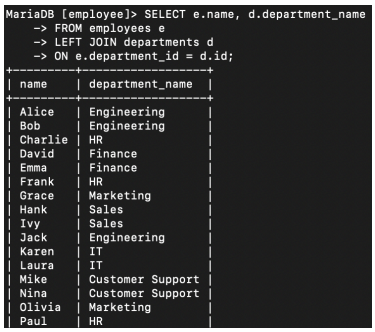
- Used a left join from departments when department IDs matched up

4.

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

- Used an inner join on employees to match up manager IDs

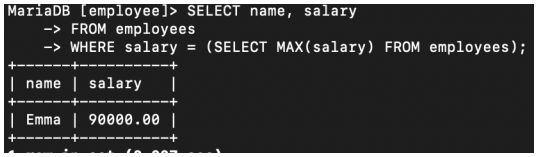
5.



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

- Used a left join from employees to match up department ids

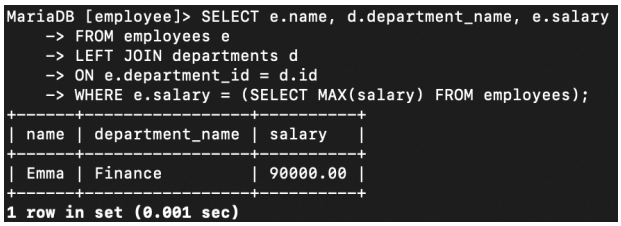
6.



```
MariaDB [employee]> SELECT name, salary
    -> FROM employees
    -> WHERE salary = (SELECT MAX(salary) FROM employees);
+------+----------+
| name | salary   |
+------+----------+
| Emma | 90000.00 |
+------+----------+
```

- Had a subquery asking for the name of the employee where the salary is the max

7.



```
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)
```

- Added on from question 6, I added a left join from employees to match up on when department IDs match up