

```
MySQL Client (MariaDB 12.1) x + v
ments on e.department_id=departments.department_name;
ERROR 1054 (42S22): Unknown column 'departments.department_name' in 'SELECT'
MariaDB [employee]> SELECT e.name AS Employee, m.name AS Manager FROM employe
es e JOIN employees m ON e.manager_id = m.id;
+-----+-----+
| Employee | Manager |
+-----+-----+
| 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 |
| Amelia | Liam |
| Elijah | William |
| Grace | Liam |
```

```
MariaDB [employee]> SELECT d.department_name, e.name AS Manager FROM departments d JOIN employees e ON d.manager_id = e.id;
```

```
+-----+-----+
| department_name | 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 (0.002 sec)
```

```
MariaDB [employee]> |
```

MySQL Client (MariaDB 12.1) × + ▾		
Lucas	Health & Safety	
Evelyn	Procurement	
David	Health & Safety	
Isabella	Machining	
Ava	Health & Safety	
Liam	Logistics	
Zoe	Health & Safety	
Sherif	NULL	
Isabella	Health & Safety	
Olivia	Packaging	
Sebastian	NULL	
Jackson	R&D	
Abigail	Logistics	
Amelia	Logistics	
Joseph	Welding	
Logan	R&D	
Sophia	Health & Safety	
Elijah	Quality Control	
Logan	Health & Safety	
Ethan	Inventory	
Jackson	Maintenance	
Sophia	Welding	
Charlotte	Inventory	
Mateo	Maintenance	
Lucas	Machining	
Ella	Welding	
James	Health & Safety	
Oliver	Health & Safety	
Mateo	Inventory	
Mia	Health & Safety	
Ava	NULL	
Oliver	Assembly	
Emma	Packaging	
Aiden	Procurement	
Grace	Machining	
Lucas	Maintenance	
Grace	Quality Control	
Jackson	Logistics	
Abigail	Quality Control	
Jackson	Health & Safety	
Noah	Health & Safety	

```
MariaDB [employee]> SELECT e.name, d.department_name FROM employees e LEFT JO
IN departments d ON e.department_id = d.id;
```

name	department_name
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
Logan	Health & Safety
Abigail	Plant Management
Aiden	Welding

```
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 (0.001 sec)
```

```
MariaDB [employee]> |
```

```
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)
```

```
MariaDB [employee]> |
```

```

MariaDB [employee]> SELECT d.department_name, COUNT(e.id) AS employee_count
-> FROM departments d
-> LEFT JOIN employees e ON d.id = e.department_id
-> GROUP BY d.department_name
-> UNION
-> SELECT 'No Department', 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 (0.021 sec)

```

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 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 (0.001 sec)

Employee	Emp_Salary	Manager	Mgr_Salary
Ella	97000	James	95000
Scarlett	77000	William	75000

2 rows in set (0.001 sec)

MariaDB [employee]> |