

Task 01:

```
SELECT first_name, last_name, email, phone_number, hire_date, department_id
FROM Employees WHERE hire_date = (SELECT max(hire_date) FROM Employees);
```

ScreenShot:

```
MariaDB [socialapp]> SELECT first_name, last_name, email, phone_number, hire_date, department_id FROM Employees WHERE hire_date = (SELECT max(hire_date) FROM Employees);
+-----+-----+-----+-----+-----+-----+
| first_name | last_name | email                | phone_number | hire_date | department_id |
+-----+-----+-----+-----+-----+-----+
| Sophia    | Wilson   | sophia.wilson@example.com | 8888888888888888 | 2022-10-05 | DPT006        |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.094 sec)
```

Task 02:

```
SELECT first_name, last_name, employee_id, phone_number, salary,
department_id
FROM employees
WHERE (department_id, salary) IN (
    SELECT department_id, MIN(salary)
    FROM employees
    GROUP BY department_id
);
```

ScreenShot:

```
MariaDB [socialapp]>
MariaDB [socialapp]> SELECT first_name, last_name, employee_id, phone_number, salary, department_id
-> FROM employees
-> WHERE (department_id, salary) IN (
->     SELECT department_id, MIN(salary)
->     FROM employees
->     GROUP BY department_id
-> );
+-----+-----+-----+-----+-----+-----+
| first_name | last_name | employee_id | phone_number | salary | department_id |
+-----+-----+-----+-----+-----+-----+
| John       | Doe       | EMP001      | 12345678901234 | 50000 | DPT001        |
| Michael    | Johnson   | EMP003      | 5555555555555555 | 45000 | DPT002        |
| David      | Wilson    | EMP005      | 7777777777777777 | 70000 | DPT003        |
| Matthew    | Taylor    | EMP007      | 6666666666666666 | 60000 | DPT004        |
| Olivia     | Brown     | EMP008      | 1111111111111111 | 50000 | DPT005        |
| Sophia     | Wilson    | EMP010      | 8888888888888888 | 65000 | DPT006        |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.016 sec)
```

Task 03:

```
SELECT e1.first_name, e1.last_name, e1.employee_id, e1.commission_pct,
e1.department_id
FROM employees e1
WHERE e1.department_id = 'DPT007' AND e1.commission_pct < ALL (
    SELECT e2.commission_pct
    FROM employees e2
    WHERE e2.department_id = 'DPT005'
);
```

ScreenShot:

```
MariaDB [socialapp]> SELECT e1.first_name, e1.last_name, e1.employee_id, e1.commission_pct, e1.department_id
-> FROM employees e1
-> WHERE e1.department_id = 'DPT007' AND e1.commission_pct < ALL (
->     SELECT e2.commission_pct
->     FROM employees e2
->     WHERE e2.department_id = 'DPT005'
-> );
Empty set (0.011 sec)
```

Table to Be Specific:

```
MariaDB [socialapp]> select * from employees;
```

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
EMP001	John	Doe	john.doe@example.com	12345678901234	2022-01-01	JOB001	50000	0.050	MNG001	DPT001
EMP002	Jane	Smith	jane.smith@example.com	98765432109876	2022-02-15	JOB002	60000	0.030	MNG001	DPT001
EMP003	Michael	Johnson	michael.johnson@example.com	55555555555555	2022-03-10	JOB001	45000	0.020	MNG002	DPT002
EMP004	Emily	Davis	emily.davis@example.com	44444444444444	2022-04-05	JOB002	55000	0.040	MNG002	DPT002
EMP005	David	Wilson	david.wilson@example.com	77777777777777	2022-05-20	JOB003	70000	0.060	MNG003	DPT003
EMP006	Sarah	Anderson	sarah.anderson@example.com	22222222222222	2022-06-25	JOB003	80000	0.050	MNG003	DPT003
EMP007	Matthew	Taylor	matthew.taylor@example.com	66666666666666	2022-07-15	JOB004	60000	0.030	MNG003	DPT004
EMP008	Olivia	Brown	olivia.brown@example.com	11111111111111	2022-08-10	JOB004	50000	0.020	MNG004	DPT005
EMP009	Daniel	Miller	daniel.miller@example.com	33333333333333	2022-09-01	JOB005	55000	0.040	MNG004	DPT005
EMP010	Sophia	Wilson	sophia.wilson@example.com	88888888888888	2022-10-05	JOB005	65000	0.050	MNG005	DPT006

```
10 rows in set (0.001 sec)
```

Task 04:

```
SELECT department_id, COUNT(*) AS total_employees
FROM employees
WHERE department_id NOT IN (
    SELECT department_id
    FROM employees
    WHERE salary > 30000
)
GROUP BY department_id;
```

ScreenShot:

```
MariaDB [socialapp]> SELECT department_id, COUNT(*) AS total_employees
-> FROM employees
-> WHERE department_id NOT IN (
->     SELECT department_id
->     FROM employees
->     WHERE salary > 30000
-> )
-> GROUP BY department_id;
Empty set (0.093 sec)
```

Task 05:

```
SELECT e1.department_id, e1.job_id, e1.commission_pct
FROM employees e1
WHERE e1.commission_pct < ANY (
    SELECT e2.commission_pct
    FROM employees e2
    WHERE e2.department_id = e1.department_id AND e2.job_id != e1.job_id
);
```

ScreenShot:

```
MariaDB [socialapp]> SELECT e1.department_id, e1.job_id, e1.commission_pct
-> FROM employees e1
-> WHERE e1.commission_pct < ANY (
->     SELECT e2.commission_pct
->     FROM employees e2
->     WHERE e2.department_id = e1.department_id AND e2.job_id != e1.job_id
-> );
```

department_id	job_id	commission_pct
DPT001	JOB002	0.030
DPT002	JOB001	0.020
DPT005	JOB004	0.020

3 rows in set (0.088 sec)

Task 06:

```
SELECT DISTINCT e1.manager_id
FROM employees e1
WHERE NOT EXISTS (
    SELECT *
    FROM employees e2
    WHERE e2.manager_id = e1.manager_id AND e2.salary < 3500
);
```

ScreenShot:

```
MariaDB [socialapp]> SELECT DISTINCT e1.manager_id
-> FROM employees e1
-> WHERE NOT EXISTS (
->     SELECT *
->     FROM employees e2
->     WHERE e2.manager_id = e1.manager_id AND e2.salary < 3500
-> );
```

manager_id
MNG001
MNG002
MNG003
MNG004
MNG005

5 rows in set (0.002 sec)

Task 07:

```
SELECT e1.first_name, e1.last_name, e1.employee_id, e1.email, e1.salary,
e1.department_id, e1.commission_pct
FROM employees e1
WHERE (e1.manager_id, e1.commission_pct) IN (
    SELECT manager_id, MIN(commission_pct)
    FROM employees
    GROUP BY manager_id
);
```

ScreenShot:

```
MariaDB [socialapp]> SELECT e1.first_name, e1.last_name, e1.employee_id, e1.email, e1.salary, e1.department_id, e1.commission_pct
-> FROM employees e1
-> WHERE (e1.manager_id, e1.commission_pct) IN (
->     SELECT manager_id, MIN(commission_pct)
->     FROM employees
->     GROUP BY manager_id
-> );
```

first_name	last_name	employee_id	email	salary	department_id	commission_pct
Jane	Smith	EMP002	jane.smith@example.com	60000	DPT001	0.030
Michael	Johnson	EMP003	michael.johnson@example.com	45000	DPT002	0.020
Matthew	Taylor	EMP007	matthew.taylor@example.com	60000	DPT004	0.030
Olivia	Brown	EMP008	olivia.brown@example.com	50000	DPT005	0.020
Sophia	Wilson	EMP010	sophia.wilson@example.com	65000	DPT006	0.050

5 rows in set (0.090 sec)