Created Table:

```
MariaDB [cse370_assignment02]> select * from employee;
+-------------+------------+-----------+-----------------------------+--------------+------------+--------+--------+----------------+------------+---------------+
| employee_id | first_name | last_name | email                       | phone_number | hire_date  | job_id | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+-----------------------------+--------------+------------+--------+--------+----------------+------------+---------------+
| EMP001      | Yuji       | Itadori   | yuji.almost@email.com       | 55512345678  | 2022-03-15 | JOB001 |  15000 |         25.122 | MNG002     | DPT007        |
| EMP002      | Megumi     | Fushiguro | megumi.notzenin@email.com   | 55556781234  | 2018-09-07 | JOB001 |  25000 |         35.211 | MNG002     | DPT007        |
| EMP003      | Nanami     | Kento     | nanami.overtime@email.com   | 55587654321  | 2013-04-02 | JOB001 |  75000 |         25.011 | MNG002     | DPT007        |
| EMP004      | Satoru     | Gojo      | gojo.infinity@email.com     | 55569696969  | 2012-12-07 | JOB002 |  90000 |         77.071 | MNG001     | DPT001        |
| EMP005      | Suguru     | Geto      | geto.kenjaku@email.com      | 55578901234  | 2012-08-13 | JOB002 |  70000 |         65.446 | MNG002     | DPT005        |
| EMP006      | Maki       | Zenin     | maki.ewzenin@email.com      | 55543215678  | 2017-05-28 | JOB003 |  40000 |         32.992 | MNG004     | DPT004        |
| EMP007      | Toge       | Inumaki   | inumaki.speaks@email.com    | 55567892345  | 2017-11-15 | JOB003 |  35000 |         42.349 | MNG004     | DPT003        |
| EMP008      | Ryomen     | Sukuna    | sukuna.fraud@email.com      | 55512345578  | 2011-02-18 | JOB001 |  80000 |         62.483 | MNG001     | DPT001        |
| EMP009      | Yuta       | Okkutsu   | yuta.rika@email.com         | 55556987745  | 2017-02-14 | JOB002 |  65000 |         68.353 | MNG004     | DPT003        |
| EMP010      | Kinji      | Hakari    | hakari.deathgamble@email.com | 55585674321  | 2016-04-27 | JOB003 |  60000 |         45.799 | MNG003     | DPT004        |
+-------------+------------+-----------+-----------------------------+--------------+------------+--------+--------+----------------+------------+---------------+
10 rows in set (0.000 sec)
```

TASK - 01:

Objective: Finding the first_name, last_name, email, phone_number, hire_date and department_id of all the employees with the latest hire_date.

Command=>

select first_name, last_name, email, phone_number, hire_date, department_id from employee where hire_date = (select max(hire_date) from employee);

```
MariaDB [cse370_assignment02]> select first_name, last_name, email, phone_number, hire_date, department_id from employee where hire_date = (select max(hire_date) from emp
loyee);
+------------+-----------+---------------------+--------------+------------+---------------+
| first_name | last_name | email               | phone_number | hire_date  | department_id |
+------------+-----------+---------------------+--------------+------------+---------------+
| Yuji       | Itadori   | yuji.almost@email.com | 55512345678  | 2022-03-15 | DPT007        |
+------------+-----------+---------------------+--------------+------------+---------------+
1 row in set (0.000 sec)
```

TASK - 02:

Objective: Finding the first_name, last_name, employee_id, phone_number, salary and department_id of all the employees with the lowest salary in each department.

Command=>

select first_name, last_name, employee_id, phone_number, salary, department_id from employee where (department_id, salary) in (select department_id, min(salary) as min_salary from employee group by department_id);

```
MariaDB [cse370_assignment02]> select first_name, last_name, employee_id, phone_number, salary, department_id from employee where (department_id, salary) in (select department_id, min(salary) as min_salary from
employee group by department_id);
+------------+-----------+-------------+--------------+--------+---------------+
| first_name | last_name | employee_id | phone_number | salary | department_id |
+------------+-----------+-------------+--------------+--------+---------------+
| Yuji       | Itadori   | EMP001      | 55512345678  |  15000 | DPT007        |
| Suguru     | Geto      | EMP005      | 55578901234  |  70000 | DPT005        |
| Maki       | Zenin     | EMP006      | 55543215678  |  40000 | DPT004        |
| Toge       | Inumaki   | EMP007      | 55567892345  |  35000 | DPT003        |
| Ryomen     | Sukuna    | EMP008      | 55512345578  |  80000 | DPT001        |
+------------+-----------+-------------+--------------+--------+---------------+
5 rows in set (0.001 sec)
```

TASK - 03:

Objective: Finding the *first_name, last_name, employee_id, commission_pct and department_id* of all the employees in the department 'DPT007' who have a lower commission_pct than all of the department 'DPT005' employees.

Command=>

select first_name, last_name, employee_id, commission_pct, department_id from employee where department_id = "DPT007" and commission_pct<all (select commission_pct from employee where department_id = "DPT005");

```
MariaDB [cse370_assignment02]> select first_name, last_name, employee_id, commission_pct, department_id from employee where department_id = "DPT007" and commission_pct<all (select commission_pct from employee wh
ere department_id = "DPT005");
+------------+-----------+-------------+----------------+---------------+
| first_name | last_name | employee_id | commission_pct | department_id |
+------------+-----------+-------------+----------------+---------------+
| Yuji       | Itadori   | EMP001      |         25.122 | DPT007        |
| Megumi     | Fushiguro | EMP002      |         35.211 | DPT007        |
| Nanami     | Kento     | EMP003      |         25.011 | DPT007        |
+------------+-----------+-------------+----------------+---------------+
3 rows in set (0.001 sec)
```

TASK - 04:

Objective: Finding the department_id and total number of employees of each department which does not have a single employee under it with a salary more than 30,000.

Command=>

select distinct department_id, count(*) as total_employees from employee where salary < 30000 group by department_id;

```
MariaDB [cse370_assignment02]> select distinct department_id, count(*) as total_employees from employee where salary < 30000 group by department_id;
+---------------+-----------------+
| department_id | total_employees |
+---------------+-----------------+
| DPT007        |               2 |
+---------------+-----------------+
1 row in set (0.001 sec)
```

TASK - 05:

Objective: For each of the departments, finding the department_id, job_id and commission_pct with commission_pct less than at least one other job_id in that department.

Command=>

*select department_id, job_id, commission_pct from employee L1 where exists(select * from employee L2 where L1.department_id=L2.department_id and L1.job_id != L2.job_id and L1.commission_pct < L2.commission_pct);*

```
MariaDB [cse370_assignment02]> select department_id, job_id, commission_pct from employee L1 where exists(select * from employee L2 where L1.department_id=L2.department_id and L1.job_id != L2.job_id and L1.commi
ssion_pct < L2.commission_pct);
+---------------+--------+----------------+
| department_id | job_id | commission_pct |
+---------------+--------+----------------+
| DPT001        | JOB001 |         62.483 |
| DPT003        | JOB003 |         42.349 |
+---------------+--------+----------------+
2 rows in set (0.000 sec)
```

TASK - 06:

Objective: Finding the manager_id who does not have any employee under them with a salary less than 3500.

Command=>

select distinct manager_id from employee where manager_id not in (select manager_id from employee where salary < 3500);

```
MariaDB [cse370_assignment02]> select distinct manager_id from employee where manager_id not in (select manager_id from employee where salary < 3500);
+------------+
| manager_id |
+------------+
| MNG002     |
| MNG001     |
| MNG004     |
| MNG003     |
+------------+
4 rows in set (0.001 sec)
```

TASK - 07:

Objective: Finding the first_name, last_name, employee_id, email, salary, department_id and commission_pct of the employee with the lowest commission_pct under each manager.

Command=>

select first_name, last_name, employee_id, email, salary, department_id, commission_pct from employee where (manager_id, commission_pct) in (select manager_id, min(commission_pct) from employee group by manager_id);

```
MariaDB [cse370_assignment02]> select first_name, last_name, employee_id, email, salary, department_id, commission_pct from employee where (manager_id, commission_pct) in (select manager_id, min(commission_pct)
from employee group by manager_id);
+------------+-----------+-------------+-----------------------------+--------+---------------+----------------+
| first_name | last_name | employee_id | email                       | salary | department_id | commission_pct |
+------------+-----------+-------------+-----------------------------+--------+---------------+----------------+
| Nanami     | Kento     | EMP003      | nanami.overtime@email.com   |  75000 | DPT007        |         25.011 |
| Maki       | Zenin     | EMP006      | maki.ewzenin@email.com      |  40000 | DPT004        |         32.992 |
| Ryomen     | Sukuna    | EMP008      | sukuna.fraud@email.com      |  80000 | DPT001        |         62.483 |
| Kinji      | Hakari    | EMP010      | hakari.deathgamble@email.com |  60000 | DPT004        |         45.799 |
+------------+-----------+-------------+-----------------------------+--------+---------------+----------------+
4 rows in set (0.001 sec)
```

Table-data extras:

create table employee(employee_id char(10), first_name varchar(20), last_name varchar(20), email varchar(60), phone_number char(14), hire_date date, job_id char(10), salary int, commission_pct decimal(5,3), manager_id char(10), department_id char(10));

insert into employee values(“EMP001”, “Yuji”, “Itadori”, “yuji.almost@email.com”, “55512345678”, “2022-03-15”, “JOB001”, 15000, 25.122, “MNG002”, “DPT007”);

insert into employee values(“EMP002”, “Megumi”, “Fushiguro”, “megumi.notzenin@email.com”, “55556781234”, “2018-09-07”, “JOB001”, 25000, 35.211, “MNG002”, “DPT007”);

insert into employee values(“EMP003”, “Nanami”, “Kento”, “nanami.overtime@email.com”, “55587654321”, “2013-04-02”, “JOB001”, 75000, 25.011, “MNG002”, “DPT007”);

insert into employee values(“EMP004”, “Satoru”, “Gojo”, “gojo.infinity@email.com”, “55569696969”, “2012-12-07”, “JOB002”, 90000, 77.071, “MNG001”, “DPT001”);

insert into employee values(“EMP005”, “Suguru”, “Geto”, “geto.kenjaku@email.com”, “55578901234”, “2012-08-13”, “JOB002”, 70000, 65.446, “MNG002”, “DPT005”);

insert into employee values(“EMP006”, “Maki”, “Zenin”, “maki.ewzenin@email.com”, “55543215678”, “2017-05-28”, “JOB003”, 40000, 32.992, “MNG004”, “DPT004”);

insert into employee values(“EMP007”, “Toge”, “Inumaki”, “inumaki.speaks@email.com”, “55567892345”, “2017-11-15”, “JOB003”, 35000, 42.349, “MNG004”, “DPT003”);

insert into employee values(“EMP008”, “Ryomen”, “Sukuna”, “sukuna.fraud@email.com”, “55512345578”, “2011-02-18”, “JOB001”, 80000, 62.483, “MNG001”, “DPT001”);

insert into employee values(“EMP009”, “Yuta”, “Okkutsu”, “yuta.rika@email.com”, “55556987745”, “2017-02-14”, “JOB002”, 65000, 68.353, “MNG004”, “DPT003”);

insert into employee values(“EMP010”, “Kinji”, “Hakari”, “hakari.deathgamble@email.com”, “55585674321”, “2016-04-27”, “JOB003”, 60000, 45.799, “MNG003”, “DPT004”);

insert into employee values(“EMP011”, “Thishi”, “Ronita”, “thishi.panda@email.com”, “55585674351”, “2001-06-29”, “JOB011”, 60000, 45.799, “MNG011”, “DPT011”);