

## CSE370 : Database Systems

### Assignment 02 | Spring 2025

ID : <24241122 > | Name : AYHAN ARASH TASIN

No 1 Query (as Plain Text)	select first_name , last_name , email,phone_number , hire_date , department_id from Employee WHERE hire_date = (select MAX(hire_date) FROM Employee);
No 1 SS (of Query & Output in Shell)	<pre>MariaDB [Company_24241122]&gt; select first_name , last_name , email,phone_number , hire_date , department_id from Employee WHERE hire_date = (select MAX(hire_date) FROM Employee); +-----+-----+-----+-----+-----+-----+   first_name   last_name   email                  phone_number   hire_date   department_id   +-----+-----+-----+-----+-----+-----+   Fatima       Akter       FatimaAkter@gmail.com   01523456789    2023-02-18   DPT007          +-----+-----+-----+-----+-----+-----+ 1 row in set (0.001 sec)</pre>
No 2 Query (as Plain Text)	select first_name,last_name,employee_id,phone_number,salary,department_id FROM Employee WHERE salary IN (select MIN(salary) From Employee group by department_id);
No 2 SS (of Query & Output in Shell)	<pre>MariaDB [Company_24241122]&gt; select first_name,last_name,employee_id,phone_number,salary,department_id FROM Employee WHERE salary IN (select MIN(salary) From Employee group by department_id); +-----+-----+-----+-----+-----+-----+   first_name   last_name   employee_id   phone_number   salary   department_id   +-----+-----+-----+-----+-----+-----+   Mohammad    Rahman      EMP001        01876543210    50000    DPT001            Yusuf       Ali         EMP003        01987654321    55000    DPT003            Omar        Hossain     EMP004        01623456789    45000    DPT004            Hamza       Hasan       EMP005        01898765432    75000    DPT005            Aisha       Begum       EMP006        01787654321    48000    DPT006            Fatima      Akter       EMP007        01523456789    62000    DPT007            Bilal       Chowdhury   EMP009        01876543211    53000    DPT002          +-----+-----+-----+-----+-----+-----+ 7 rows in set (0.006 sec)</pre>
No 3 Query (as Plain Text)	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');

<b>No 3 SS</b> <b>(of Query &amp; Output in Shell)</b>	<pre>MariaDB [Company_24241122]&gt; SELECT first_name, last_name, employee_id, commission_pct, department_id FROM Employee WHERE department_id = 'DPT007' AND commission_pct &lt; ALL (SELECT commission_pct FROM Employee WHERE department_id = 'DPT005'); +-----+-----+-----+-----+-----+   first_name   last_name   employee_id   commission_pct   department_id   +-----+-----+-----+-----+-----+   Fatima       Akter       EMP007        0.070            DPT007          +-----+-----+-----+-----+-----+ 1 row in set (0.001 sec)</pre>
<b>No 4 Query</b> <b>(as Plain Text)</b>	<b>SELECT department_id, COUNT(*) AS total_employees FROM Employee GROUP BY department_id HAVING MAX(salary) &lt;= 30000;</b>
<b>No 4 SS</b> <b>(of Query &amp; Output in Shell)</b>	<pre>MariaDB [Company_24241122]&gt; SELECT department_id, COUNT(*) AS total_employees FROM Employee GROUP BY department_id HAVING MAX(salary) &lt;= 30000; +-----+-----+   department_id   total_employees   +-----+-----+   DPT004          1                 +-----+-----+ 1 row in set (0.001 sec)</pre>
<b>No 5 Query</b> <b>(as Plain Text)</b>	<b>SELECT department_id, job_id, commission_pct FROM Employee e1 WHERE commission_pct &lt; ANY(SELECT commission_pct FROM Employee e2 WHERE e1.department_id = e2.department_id AND e1.job_id != e2.job_id);</b>
<b>No 5 SS</b> <b>(of Query &amp; Output in Shell)</b>	<pre>MariaDB [Company_24241122]&gt; SELECT department_id, job_id, commission_pct FROM Employee e1 WHERE commission_pct &lt; ANY(SELECT commission_pct FROM Employee e2 WHERE e1.department_id = e2.department_id AND e1.job_id != e2.job_id); +-----+-----+-----+   department_id   job_id   commission_pct   +-----+-----+-----+   DPT001          JOB001   0.050              DPT003          JOB003   0.060              DPT002          JOB001   0.065            +-----+-----+-----+ 3 rows in set (0.016 sec)</pre>
<b>No 6 Query</b> <b>(as Plain Text)</b>	<b>select manager_id FROM Employee Group BY manager_id HAVING MIN(salary)&gt;=3500;</b>

No 6 SS  
(of Query & Output  
in Shell)

```
MariaDB [Company_24241122]> select manager_id FROM EMPLOYEE Group BY manager_id HAVING MIN(salary)>=3500;
+-----+
| manager_id |
+-----+
| MNG001     |
| MNG002     |
| MNG003     |
+-----+
3 rows in set (0.001 sec)
```

No 7 Query  
(as Plain Text)

SELECT first\_name, last\_name, employee\_id, email, salary, department\_id, commission\_pct FROM Employee e1 WHERE commission\_pct = (SELECT MIN(e2.commission\_pct) FROM Employee e2 WHERE e1.manager\_id = e2.manager\_id);

No 7 SS  
(of Query & Output  
in Shell)

```
MariaDB [Company_24241122]> SELECT first_name, last_name, employee_id, email, salary, department_id, commission_pct FROM Employee e1 WHERE commission_pct =
(SELECT MIN(e2.commission_pct) FROM Employee e2 WHERE e1.manager_id = e2.manager_id);
+-----+-----+-----+-----+-----+-----+-----+
| first_name | last_name | employee_id | email | salary | department_id | commission_pct |
+-----+-----+-----+-----+-----+-----+-----+
| Mohammad | Rahman | EMP001 | MohammadRahman@gmail.com | 50000 | DPT001 | 0.050 |
| Omar | Hossain | EMP004 | OmarHossain@gmail.com | 45000 | DPT004 | 0.040 |
| Hamza | Hasan | EMP005 | HamzaHasan@gmail.com | 75000 | DPT005 | 0.085 |
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.001 sec)
```