

## CSE370 : Database Systems

### Assignment 02 | Summer 2025

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#### No 1 Query (as Plain Text)

```
create database company_24241189;
use company_24241189;
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', 'Alice', 'Smith', 'EMA001', '01710000001', '2019-04-01', 'JOB001', 28000, 0.001, 'MNG001', 'DPT001'), --
changed
('EMP002', 'Bob', 'Johnson', 'EMA002', '01710000002', '2020-05-15', 'JOB002', 27000, 0.002, 'MNG002', 'DPT002'), --
changed
('EMP003', 'Charlie', 'Williams', 'EMA003', '01710000003', '2021-03-22', 'JOB003', 43000, 0.003, 'MNG003', 'DPT003'),
('EMP004', 'Diana', 'Brown', 'EMA004', '01710000004', '2020-11-30', 'JOB004', 25000, 0.004, 'MNG004', 'DPT004'), --
changed
('EMP005', 'Ethan', 'Jones', 'EMA005', '01710000005', '2018-08-10', 'JOB005', 42000, 0.008, 'MNG005', 'DPT005'),
('EMP006', 'Fiona', 'Garcia', 'EMA006', '01710000006', '2022-01-05', 'JOB006', 49000, 0.006, 'MNG006', 'DPT006'),
('EMP007', 'George', 'Martinez', 'EMA007', '01710000007', '2021-06-18', 'JOB007', 26000, 0.002, 'MNG007', 'DPT007'), --
changed
('EMP008', 'Hannah', 'Lee', 'EMA008', '01710000008', '2019-10-12', 'JOB008', 44000, 0.008, 'MNG008', 'DPT008'),
```

	<p>('EMP009', 'Ian', 'Taylor', 'EMA009', '01710000009', '2023-02-25', 'JOB009', 43000, 0.009, 'MNG009', 'DPT009'), ('EMP010', 'Julia', 'Anderson', 'EMA010', '01710000010', '2020-07-07', 'JOB010', 47000, 0.010, 'MNG010', 'DPT010');</p> <p>select first_name,last_name,email,phone_number,hire_date,department_id from employee where hire_date=(select max(hire_date)from employee);</p>												
<b>No 1 SS (of Query &amp; Output in Shell)</b>	<div><div>1 v</div><div>select first_name,last_name,email,phone_number,hire_date,department_id from employee</div></div> <div><div>2</div><div>where hire_date=(select max(hire_date)from employee);</div></div> <div><div>3</div><div></div></div> <table><tr><th>first_name</th><th>last_name</th><th>email</th><th>phone_number</th><th>hire_date</th><th>department_id</th></tr><tr><td>Ian</td><td>Taylor</td><td>EMA009</td><td>01710000009</td><td>2023-02-25</td><td>DPT009</td></tr></table>	first_name	last_name	email	phone_number	hire_date	department_id	Ian	Taylor	EMA009	01710000009	2023-02-25	DPT009
first_name	last_name	email	phone_number	hire_date	department_id								
Ian	Taylor	EMA009	01710000009	2023-02-25	DPT009								
<b>No 2 Query (as Plain Text)</b>	<p>select first_name,last_name,employee_id,phone_number,salary,department_id from employee E where salary=(select min(salary)from employee M where M.department_id = E.department_id);</p>												

**No 2 SS**  
**(of Query & Output**  
**in Shell)**

```
1 v select first_name,last_name,employee_id,phone_number,salary,department_id from employee E
2   where salary=(select min(salary)from employee M where M.department_id = E.department_id);
3
```

first_name	last_name	employee_id	phone_number	salary	department_id
Alice	Smith	EMP001	01710000001	28000	DPT001
Bob	Johnson	EMP002	01710000002	27000	DPT002
Charlie	Williams	EMP003	01710000003	43000	DPT003
Diana	Brown	EMP004	01710000004	25000	DPT004
Ethan	Jones	EMP005	01710000005	42000	DPT005
Fiona	Garcia	EMP006	01710000006	49000	DPT006
George	Martinez	EMP007	01710000007	26000	DPT007
Hannah	Lee	EMP008	01710000008	44000	DPT008
Ian	Taylor	EMP009	01710000009	43000	DPT009
Julia	Anderson	EMP010	01710000010	47000	DPT010

**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');
```

No 3 SS  
(of Query & Output  
in Shell)

```
1 v select first_name,last_name,employee_id,commission_pct,department_id from employee
2   where department_id='DPT007' and commission_pct < all(select commission_pct from employee wher
3
```

first_name	last_name	employee_id	commission_pct	department_id
George	Martinez	EMP007	0.002	DPT007

No 4 Query  
(as Plain Text)

```
select department_id, count(*) as total_employees from employee
group by department_id having max(salary)<=30000;
```

No 4 SS  
(of Query & Output  
in Shell)

```
1 v select department_id, count(*) as total_employees from employee
2   group by department_id having max(salary)<=30000;
3
```

department_id	total_employees
DPT001	1
DPT002	1
DPT004	1
DPT007	1

No 5 Query (as Plain Text)	select department_id,job_id,commission_pct from employee E where commission_pct<any (select commission_pct from employee M where E.department_id=M.department_id and E.job_id != M.job_id);
No 5 SS (of Query & Output in Shell)	<div><div>1 v select department_id,job_id,commission_pct from employee E where commission_pct&lt;any 2 (select commission_pct from employee M where E.department_id=M.department_id and E.job_id != 3</div><div></div></div> <div>department_id job_id commission_pct</div>
No 6 Query (as Plain Text)	select manager_id from employee group by manager_id having min(salary)>=3500;

No 6 SS (of Query & Output in Shell)	<div>1 select manager_id from employee group by manager_id having min(salary)&gt;=3500;</div> <table><tr><th>manager_id</th></tr><tr><td>MNG001</td></tr><tr><td>MNG002</td></tr><tr><td>MNG003</td></tr><tr><td>MNG004</td></tr><tr><td>MNG005</td></tr><tr><td>MNG006</td></tr><tr><td>MNG007</td></tr><tr><td>MNG008</td></tr><tr><td>MNG009</td></tr><tr><td>MNG010</td></tr></table>	manager_id	MNG001	MNG002	MNG003	MNG004	MNG005	MNG006	MNG007	MNG008	MNG009	MNG010
manager_id												
MNG001												
MNG002												
MNG003												
MNG004												
MNG005												
MNG006												
MNG007												
MNG008												
MNG009												
MNG010												
No 7 Query (as Plain Text)	select first_name,last_name,employee_id,email,salary,department_id,commission_pct from employee E where commission_pct=(select min(commission_pct) from employee M where E.manager_id=M.manager_id);											

No 7 SS  
(of Query & Output  
in Shell)

```
1 v select first_name,last_name,employee_id,email,salary,department_id,commission_pct from employ
2 where commission_pct=(select min(commission_pct) from employee M where E.manager_id=M.manager
3
```

first_name	last_name	employee_id	email	salary	department_id	commission_pct
Alice	Smith	EMP001	EMA001	28000	DPT001	0.001
Bob	Johnson	EMP002	EMA002	27000	DPT002	0.002
Charlie	Williams	EMP003	EMA003	43000	DPT003	0.003
Diana	Brown	EMP004	EMA004	25000	DPT004	0.004
Ethan	Jones	EMP005	EMA005	42000	DPT005	0.008
Fiona	Garcia	EMP006	EMA006	49000	DPT006	0.006
George	Martinez	EMP007	EMA007	26000	DPT007	0.002
Hannah	Lee	EMP008	EMA008	44000	DPT008	0.008
Ian	Taylor	EMP009	EMA009	43000	DPT009	0.009
Julia	Anderson	EMP010	EMA010	47000	DPT010	0.010