

## Đào Huy Hoàng\_21110297

```
SET search_path TO hrschema;
```

-- Câu a

```
SELECT CONCAT(first_name, ' ', last_name) AS name, salary,  
salary*0.15 AS fifteen_percent_salary  
FROM employees
```

-- Câu b

```
SELECT SUM(salary) AS tong_tien_luong  
FROM employees
```

-- Câu c

```
SELECT  
    ROUND(MAX(salary), 2),  
    ROUND(MIN(salary), 2),  
    ROUND(AVG(salary), 2),  
    COUNT(employee_id)  
FROM employees
```

-- Câu d

```
SELECT DISTINCT(job_id), job_title  
FROM jobs  
ORDER BY job_id
```

-- Câu e

```
SELECT MAX(e.salary)
FROM employees AS e
INNER JOIN jobs AS j ON e.job_id = j.job_id
WHERE j.job_title = 'Programmer'
```

-- Câu f

```
SELECT (MAX(salary) - MIN(salary)) AS chênh_lech_luong
FROM employees
```

-- Câu g

```
WITH managers AS (
SELECT *
FROM employees
WHERE employees.employee_id
IN (SELECT DISTINCT(manager_id) FROM employees)
)
SELECT
    CONCAT(m.first_name, ' ', m.last_name) AS manager_name
FROM managers AS m
```

-- Câu h

```
SELECT ql.manager_id, MIN(nv.salary)
FROM employees AS nv
```

```
INNER JOIN employees AS ql on nv.employee_id = ql.manager_id  
GROUP BY ql.manager_id
```

-- Câu i

```
WITH PhongBan AS (  
SELECT d.department_id, d.department_name, SUM(e.salary) AS  
tong_luong  
FROM employees AS e  
INNER JOIN departments AS d on e.department_id =  
d.department_id  
GROUP BY d.department_id, d.department_name  
)  
SELECT *  
FROM PhongBan  
WHERE tong_luong > 30000
```

-- Câu j

```
SELECT  
    CONCAT(e.first_name, ' ', e.last_name) AS name,  
    j.job_title,  
    e.salary  
FROM employees AS e  
INNER JOIN jobs AS j ON e.job_id = j.job_id  
WHERE j.job_title != 'Programmer'  
AND j.job_title != 'Shipping Clerk'
```

AND e.salary NOT IN ('4500', '10000', '15000')

-- Câu k

```
SELECT d.department_name, COUNT(e.employee_id) AS  
so_nhan_vien, FLOOR(AVG(e.salary)) AS luong_tbinh  
FROM employees AS e  
INNER JOIN departments AS d ON e.department_id =  
d.department_id  
GROUP BY d.department_name  
HAVING (COUNT(e.employee_id)) > 5
```

-- Câu l

```
SELECT j.job_title, FLOOR(AVG(e.salary)) AS luong_tbinh  
FROM employees AS e  
INNER JOIN jobs AS j ON e.job_id = j.job_id  
GROUP BY j.job_title
```

-- Câu m

```
WITH managers AS (  
SELECT *  
FROM employees  
WHERE employees.employee_id  
IN (SELECT DISTINCT(manager_id) FROM employees)  
)  
SELECT
```

```
        CONCAT(m.first_name, ' ', m.last_name) AS name,  
        d.department_name,  
        c.country_name  
FROM managers AS m  
JOIN departments AS d ON m.department_id = d.department_id  
JOIN locations AS l ON d.location_id = l.location_id  
JOIN countries AS c ON l.country_id = c.country_id
```

-- Câu n

```
SELECT  
    j.job_title,  
    CONCAT(e.first_name, ' ', e.last_name) AS name,  
    (e.salary - (SELECT MIN(salary) FROM employees)) AS  
    chenh_lech_luong  
FROM employees AS e  
INNER JOIN jobs AS j ON e.job_id = j.job_id  
ORDER BY chenh_lech_luong DESC  
LIMIT 3;
```