### **CENG316 – Database Systems Assignment 3**

# 191180005 - Selin Cansu Akbaş

### Part 1

1) SELECT last\_name, first\_name, job\_id,
DECODE(job\_id, 'AD\_PRES', 'A',

'ST\_MAN', 'B',

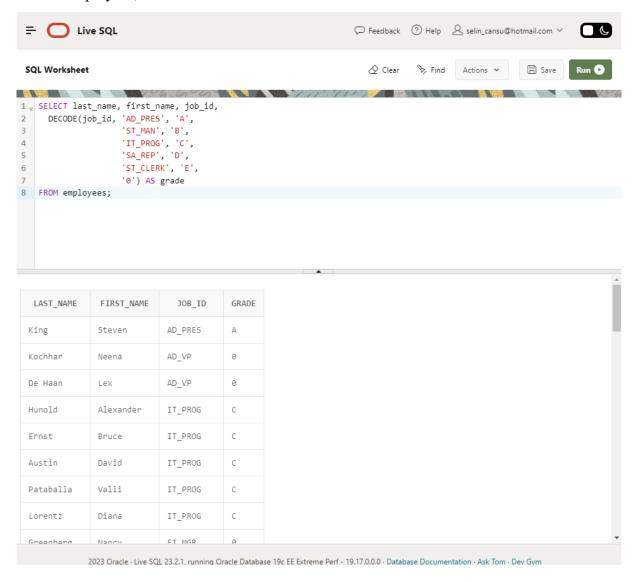
'IT\_PROG', 'C',

'SA\_REP', 'D',

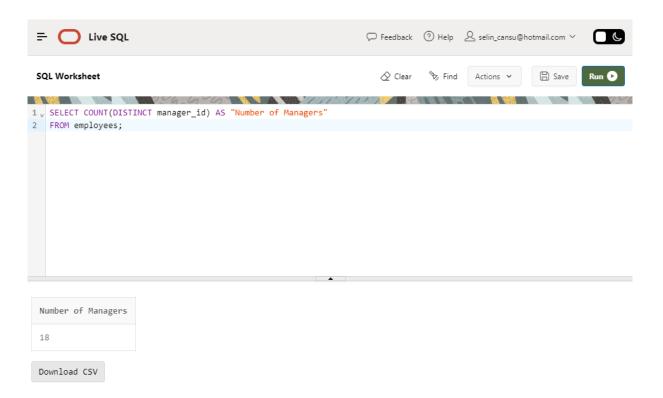
'ST\_CLERK', 'E',

'0') AS grade

## FROM employees;



**2)** SELECT COUNT(DISTINCT manager\_id) AS "Number of Managers" FROM employees;



3) SELECT manager\_id, MAX(salary) AS highest\_salary

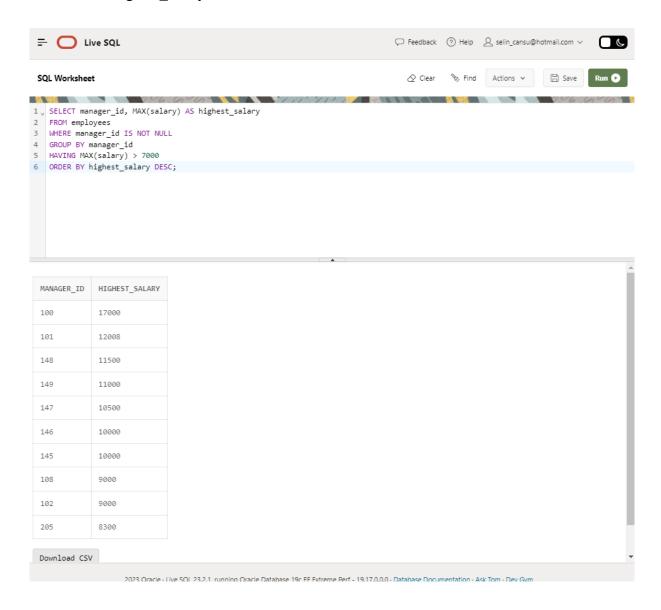
FROM employees

WHERE manager\_id IS NOT NULL

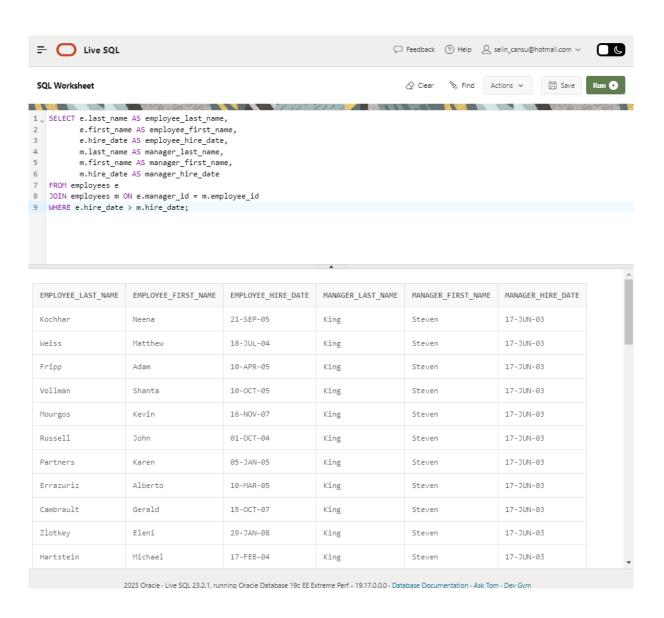
GROUP BY manager\_id

HAVING MAX(salary) > 7000

ORDER BY highest salary DESC;

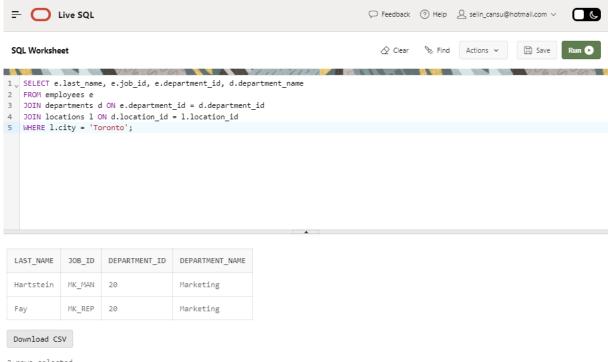


4) SELECT e.last\_name AS employee\_last\_name, e.first\_name AS employee\_first\_name, e.hire\_date AS employee\_hire\_date, m.last\_name AS manager\_last\_name, m.first\_name AS manager\_first\_name, m.hire\_date AS manager\_hire\_date
FROM employees e
JOIN employees m ON e.manager\_id = m.employee\_id
WHERE e.hire\_date > m.hire\_date;



## Part 2

5) SELECT e.last name, e.job id, e.department id, d.department name FROM employees e JOIN departments d ON e.department\_id = d.department\_id JOIN locations 1 ON d.location\_id = l.location\_id WHERE 1.city = 'Toronto';

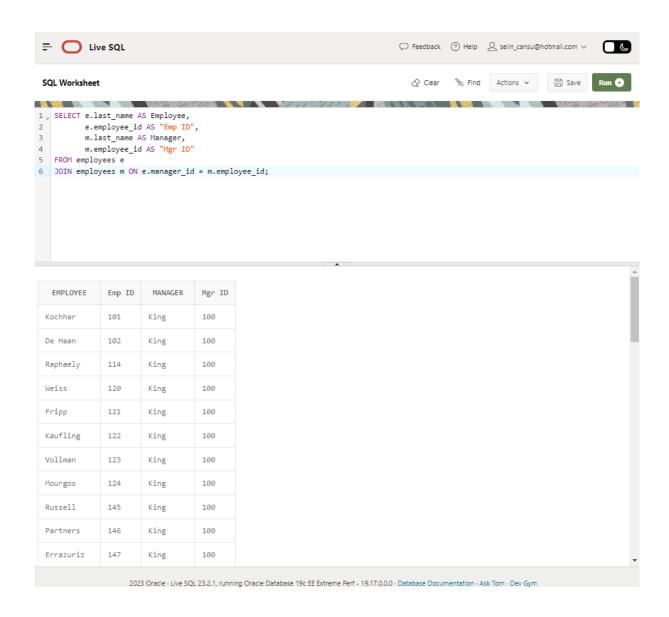


2 rows selected.

6) SELECT e.last\_name AS Employee,e.employee\_id AS "Emp ID",m.last\_name AS Manager,m.employee\_id AS "Mgr ID"

FROM employees e

JOIN employees m ON e.manager\_id = m.employee\_id;



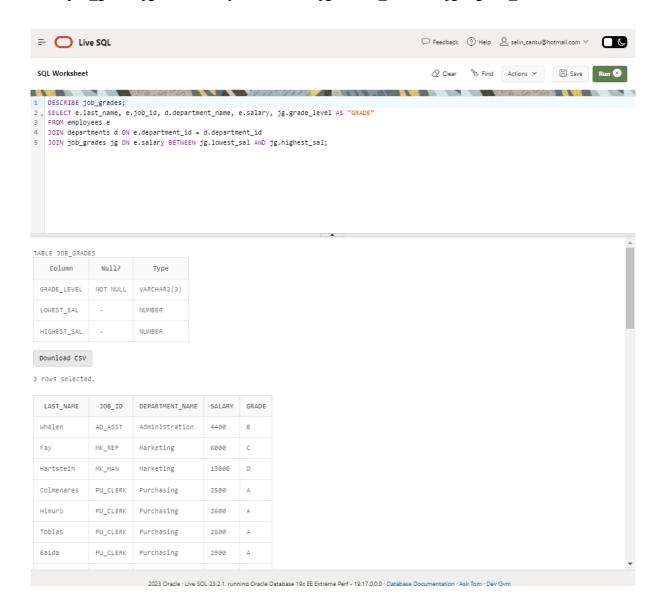
## 7) DESCRIBE job\_grades;

SELECT e.last\_name, e.job\_id, d.department\_name, e.salary, jg.grade\_level AS "GRADE"

FROM employees e

JOIN departments d ON e.department\_id = d.department\_id

JOIN job grades jg ON e.salary BETWEEN jg.lowest sal AND jg.highest sal;



8) SELECT e.last name AS employee last name,

e.first name AS employee first name,

e.hire\_date AS employee\_hire\_date,

(SELECT m.last\_name || ', ' || m.first\_name

FROM employees m

WHERE m.employee id = e.manager id) AS manager name,

(SELECT m.hire\_date

FROM employees m

WHERE m.employee\_id = e.manager\_id) AS manager\_hire\_date

FROM employees e

WHERE e.hire\_date > (SELECT m.hire\_date

FROM employees m

WHERE m.employee\_id = e.manager\_id);

