

TEMA 3 LABORATOR BAZE DE DATE

SANDU RALUCA-IOANA 142

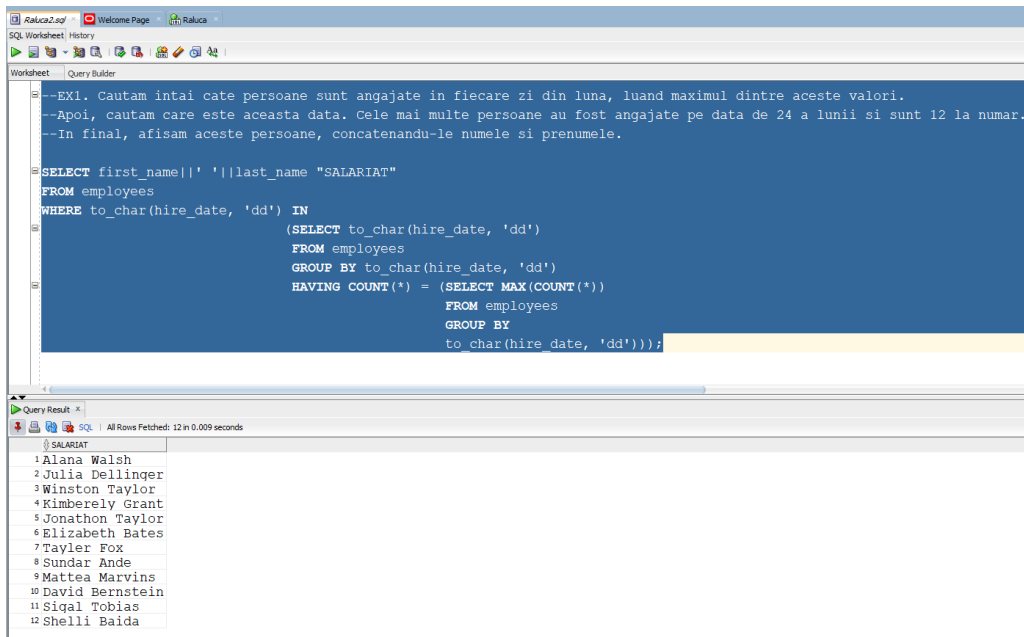
EX1.

--Cautam intai cate persoane sunt angajate in fiecare zi din luna, luand maximul dintre aceste valori.

--Apoi, cautam care este aceasta data. Cele mai multe persoane au fost angajate pe data de 24 a lunii si sunt 12 la numar.

--In final, afisam aceste persoane, concatenandu-le numele si prenumele.

```
SELECT first_name||' '||last_name "SALARIAT"
FROM employees
WHERE to_char(hire_date, 'dd') IN
    (SELECT to_char(hire_date, 'dd')
    FROM employees
    GROUP BY to_char(hire_date, 'dd')
    HAVING COUNT(*) = (SELECT MAX(COUNT(*))
    FROM employees
    GROUP BY to_char(hire_date, 'dd')));
```



The screenshot shows a SQL query execution in a database tool. The query is displayed in the 'Query Builder' tab, and the results are shown in the 'Query Result' tab. The query is as follows:

```
--EX1. Cautam intai cate persoane sunt angajate in fiecare zi din luna, luand maximul dintre aceste valori.
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FROM employees
WHERE to_char(hire_date, 'dd') IN
    (SELECT to_char(hire_date, 'dd')
    FROM employees
    GROUP BY to_char(hire_date, 'dd')
    HAVING COUNT(*) = (SELECT MAX(COUNT(*))
    FROM employees
    GROUP BY
    to_char(hire_date, 'dd')));
```

The 'Query Result' tab shows the following results:

SALARIAT
1 Alana Walsh
2 Julia Dellinger
3 Winston Taylor
4 Kimberely Grant
5 Jonathon Taylor
6 Elizabeth Bates
7 Tayler Fox
8 Sundar Ande
9 Mattea Marvins
10 David Bernstein
11 Sigal Tobias
12 Shelli Baida

EX2.

--SUBCERERE IN CLAUZA SELECT

```
SELECT e.employee_id, first_name||' '||last_name ANGAJAT,  
       NVL((SELECT COUNT(manager_id)  
            FROM employees  
            WHERE manager_id = e.employee_id  
            GROUP BY manager_id),0) as "NUMAR DE SUBALTERNI"
```

FROM employees e

--SUBCERERE IN FROM

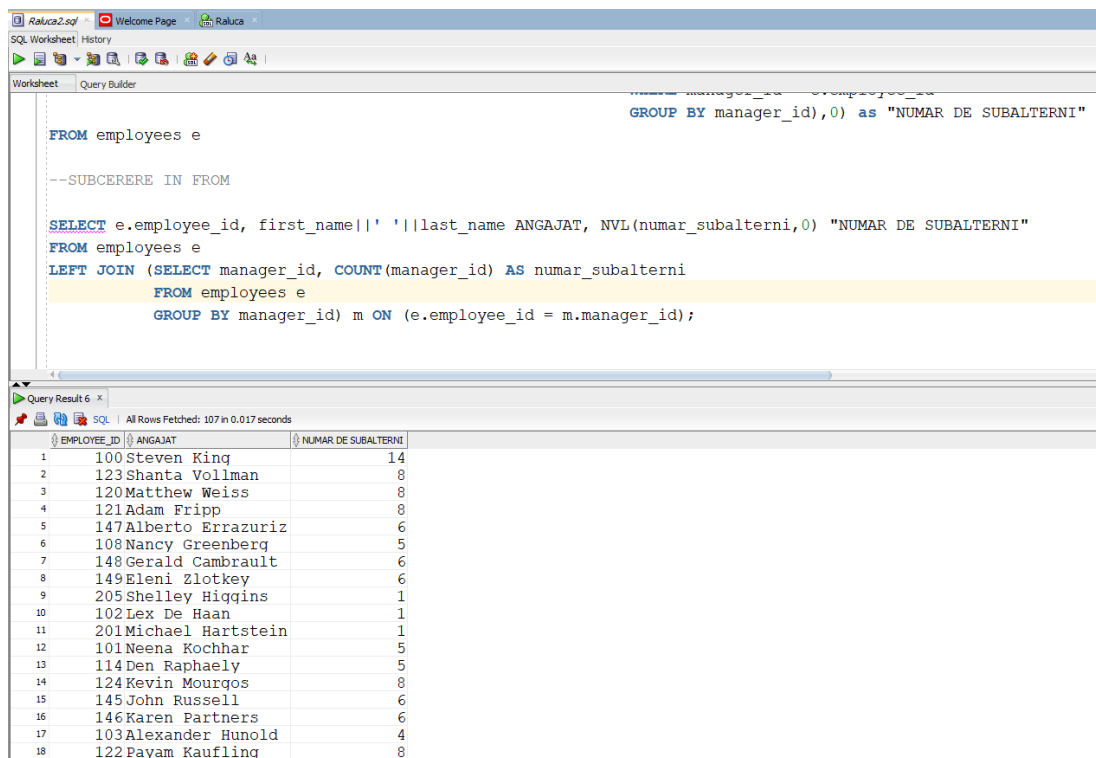
```
SELECT e.employee_id, first_name||' '||last_name ANGAJAT, NVL(numar_subalterni,0) "NUMAR DE  
SUBALTERNI"
```

FROM employees e

```
LEFT JOIN (SELECT manager_id, COUNT(manager_id) AS numar_subalterni
```

```
FROM employees e
```

```
GROUP BY manager_id) m ON (e.employee_id = m.manager_id);
```



The screenshot shows an SQL IDE window with a query editor and a results pane. The query editor contains the following SQL code:

```
FROM employees e  
  
--SUBCERERE IN FROM  
  
SELECT e.employee_id, first_name||' '||last_name ANGAJAT, NVL(numar_subalterni,0) "NUMAR DE SUBALTERNI"  
FROM employees e  
LEFT JOIN (SELECT manager_id, COUNT(manager_id) AS numar_subalterni  
            FROM employees e  
            GROUP BY manager_id) m ON (e.employee_id = m.manager_id);
```

The results pane displays the output of the query, showing 18 rows of data. The columns are EMPLOYEE_ID, ANGAJAT, and NUMAR DE SUBALTERNI.

EMPLOYEE_ID	ANGAJAT	NUMAR DE SUBALTERNI
100	Steven King	14
123	Shanta Vollman	8
120	Matthew Weiss	8
121	Adam Fripp	8
147	Alberto Errazuriz	6
108	Nancy Greenberg	5
148	Gerald Cambrault	6
149	Eleni Zlotkey	6
205	Shelley Higgins	1
102	Lex De Haan	1
201	Michael Hartstein	1
101	Neena Kochhar	5
114	Den Raphaely	5
124	Kevin Mourgos	8
145	John Russell	6
146	Karen Partners	6
103	Alexander Hunold	4
122	Payam Kaufling	8

EX3.

--Folosim clauza WITH. Selectam din tabelul job_history printr-o subcerere, numarul de zile lucrate de fiecare angajat in trecut,

--precum si orasul in care a lucrat atatea zile. Apoi selectam numarul de zile lucrate pana in prezent de fiecare angajat in orasul curent.

--Facem UNION intre cele doua rezultate, astfel incat sa gasim istoricul complet al angajatilor. Ne asiguram ca nu avem duplicate.

--In final, listam pentru fiecare angajat orasul in care a lucrat cele mai multe zile.

```
WITH zile_lucrate_in_total AS (SELECT cod, city, SUM(zile) AS ZILE_TOTAL
                                FROM
                                (SELECT e.employee_id cod, l.city, SUM(end_date - start_date) zile
                                  FROM job_history j
                                  LEFT JOIN employees e ON (e.employee_id = j.employee_id)
                                  LEFT JOIN departments d ON (d.department_id = j.department_id)
                                  LEFT JOIN locations l ON (l.location_id = d.location_id)
                                  GROUP BY e.employee_id, city)
                                UNION
                                SELECT e.employee_id cod, city, ROUND(sysdate - hire_date) zile
                                  FROM employees e
                                  LEFT JOIN departments USING (department_id)
                                  LEFT JOIN locations USING (location_id)
                                )
                                GROUP BY cod, city)

SELECT DISTINCT rez2.cod, rez2.city
FROM (SELECT MAX(ZILE_TOTAL) AS ZILE_TOTAL, cod
      FROM zile_lucrate_in_total
      GROUP BY cod) rez1
JOIN (SELECT MAX(ZILE_TOTAL) AS ZILE_TOTAL, cod, city
      FROM zile_lucrate_in_total
      GROUP BY cod, city) rez2
USING (ZILE_TOTAL);
```

	COD	CITY
1	110	Seattle
2	122	South San Francisco
3	132	South San Francisco
4	138	South San Francisco
5	147	Oxford
6	148	Oxford
7	163	Oxford
8	167	Oxford
9	169	Oxford
10	175	Oxford
11	176	Oxford
12	178	(null)
13	179	Oxford
14	181	South San Francisco
15	204	Munich
16	112	Seattle
17	113	Seattle
18	114	Seattle
19	115	Seattle
20	119	Seattle
21	140	South San Francisco
22	142	South San Francisco
23	173	Oxford
24	196	South San Francisco
25	103	Southlake
26	109	Seattle
27	116	Seattle
28	126	South San Francisco
29	133	South San Francisco
30	146	Oxford
31	154	Oxford
32	156	Oxford
33	157	Oxford
34	160	Oxford