

/\*

1. (8p) Pentru fiecare proiect in cadrul caruia numarul de angajati care au lucrat la acesta este mai mic decat 7, sa se afiseze angajatii care au lucrat in toate aceste proiecte. Se vor afisa id-ul angajatului, numele acestuia, salariul, numarul de zile lucrate in cadrul respectivelor proiecte (numarul de zile se calculeaza in functie de -> start\_date – data la care a inceput lucrul, end\_date – data la care a finalizat lucrul) – coloana o sa se numeasca NrZile. De asemenea, sa se afiseze si o coloana numita Nr. total proiecte – aceasta o sa contina numarul total de proiecte lucrate de angajatul respectiv.

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/\*OBS: angajatul 145 are end\_date inainte de start deci si nr de zile va fii pe minus\*/

/\*rez1\*/

CREATE VIEW works\_7 AS

SELECT w.project\_id, w.employee\_id FROM works\_on w

JOIN (SELECT project\_id, COUNT(employee\_id) NR\_ANG FROM works\_on GROUP BY project\_id) i\_p

ON i\_p.project\_id = w.project\_id

WHERE i\_p.NR\_ANG < 7;

CREATE VIEW date\_proiecte

SELECT employee\_id, COUNT(project\_id) NR\_P, SUM(end\_date - start\_date) NrZile FROM works\_on

GROUP BY employee\_id;

SELECT DISTINCT e.employee\_id, e.last\_name, e.salary, dp.NrZile, dp.NR\_P

FROM employees e

JOIN works\_7 w ON w.employee\_id = e.employee\_id

JOIN date\_proiecte dp ON dp.employee\_id = e.employee\_id;

The screenshot shows the Oracle SQL Developer interface. The main window displays a SQL script with the following content:

```

/*rez1*/
CREATE VIEW works_7 AS
SELECT w.project_id, w.employee_id FROM works_on w
JOIN (SELECT project_id, COUNT(employee_id) NR_ANG FROM works_on GROUP BY project_id) i_p
ON i_p.project_id = w.project_id
WHERE i_p.NR_ANG < 7;

CREATE VIEW date_proiecte
SELECT employee_id, COUNT(project_id) NR_P, SUM(end_date - start_date) NrZile FROM works_on
GROUP BY employee_id;

SELECT DISTINCT e.employee_id, e.last_name, e.salary, dp.NrZile, dp.NR_P
FROM employees e

```

Below the script, the 'Query Results' window shows the output of the final query. It indicates 'All Rows Fetched: 7 in 0.054 seconds'. The results are displayed in a table with 5 columns: EMPLOYEE\_ID, LAST\_NAME, SALARY, NRZILE, and NR\_P.

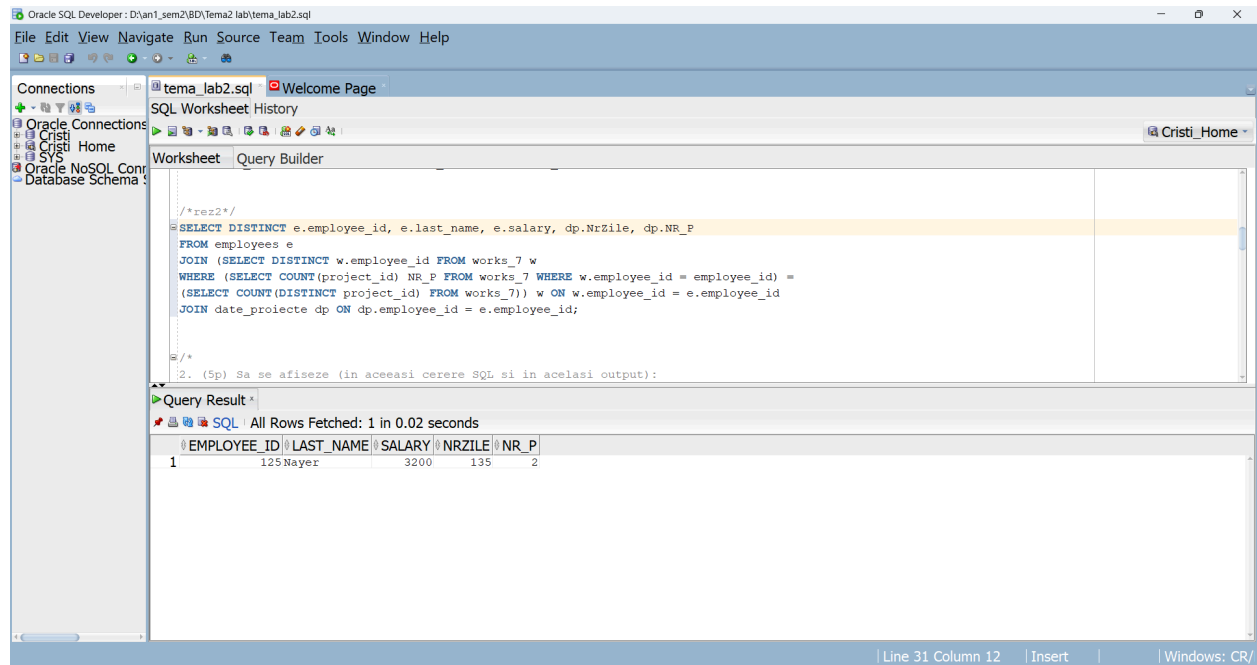
EMPLOYEE_ID	LAST_NAME	SALARY	NRZILE	NR_P
1	125 Nayer	3200	135	2
2	136 Philtanker	2200	87	1
3	140 Patel	2500	74	2
4	145 Russell	14000	-264	2
5	101 Kochhar	17000	98	2
6	148 Cambrault	11000	91	2
7	200 Whalen	4400	98	2

/\*rez2\*/

```

SELECT DISTINCT e.employee_id, e.last_name, e.salary, dp.NrZile, dp.NR_P
FROM employees e
JOIN (SELECT DISTINCT w.employee_id FROM works_7 w
WHERE (SELECT COUNT(project_id) NR_P FROM works_7 WHERE w.employee_id =
employee_id) =
(SELECT COUNT(DISTINCT project_id) FROM works_7)) w ON w.employee_id =
e.employee_id
JOIN date_proiecte dp ON dp.employee_id = e.employee_id;

```



/\*

2. (5p) Sa se afiseze (in aceeași cerere SQL si in același output):

- suma salariilor, pentru job-urile care incep cu litera S;
- media generala a salariilor, pentru job-ul avand salariul maxim;
- salariul minim, pentru fiecare din celelalte job-uri.

\*/

/\*view pt cerinta a)\*/

CREATE VIEW joburi\_S AS

SELECT \* FROM jobs WHERE UPPER(job\_title) LIKE 'S%';

/\*view pt cerinta b)\*/

CREATE VIEW super\_job AS

SELECT \* FROM jobs WHERE max\_salary = (SELECT MAX(max\_salary) FROM jobs);

/\*view pt cerinta c)\*/

CREATE VIEW celalalte\_joburi AS

SELECT \* FROM jobs

MINUS

(SELECT \* FROM joburi\_s UNION SELECT \* FROM super\_job);

/\*a)\*/

SELECT 'suma salariilor, pentru job-urile care incep cu litera S(' || js.job\_title || '): ' ||

to\_char(SUM(salary)) FROM employees e

JOIN joburi\_s js ON js.job\_id = e.job\_id

GROUP BY js.job\_id, js.job\_title

UNION

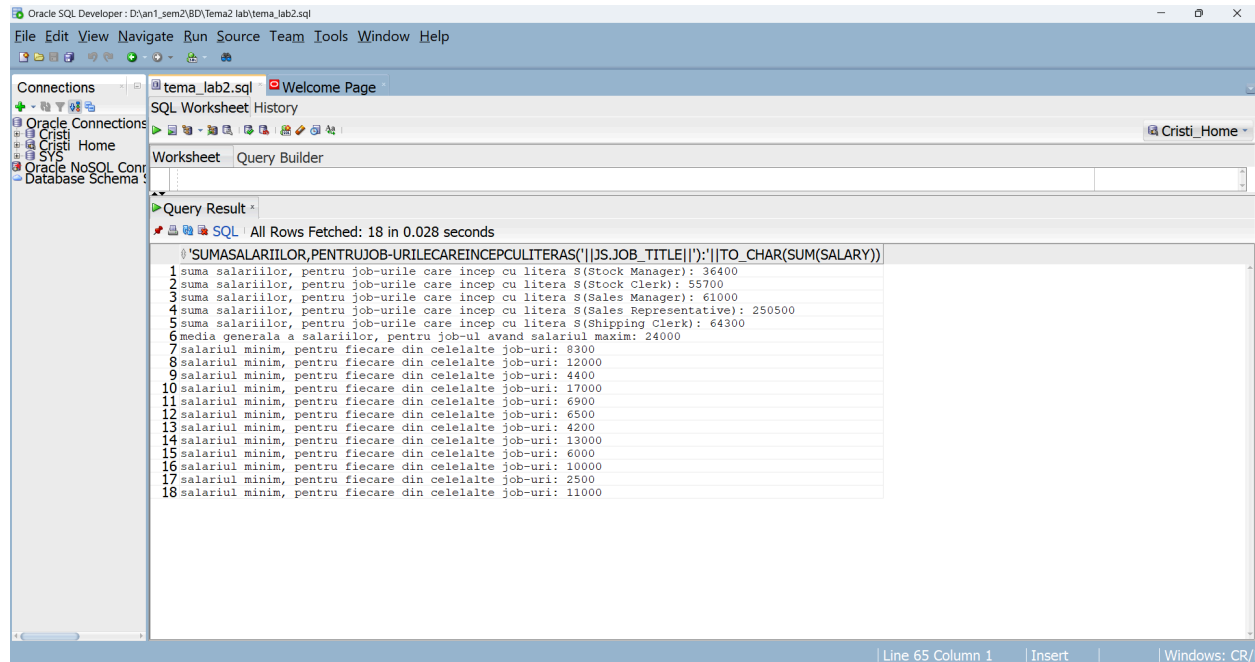
/\*b)\*/

```
SELECT 'media generala a salariilor, pentru job-ul avand salariul maxim: ' ||  
to_char(AVG(e.salary)) FROM employees e  
JOIN super_job sj ON sj.job_id = e.job_id  
GROUP BY sj.job_id
```

UNION

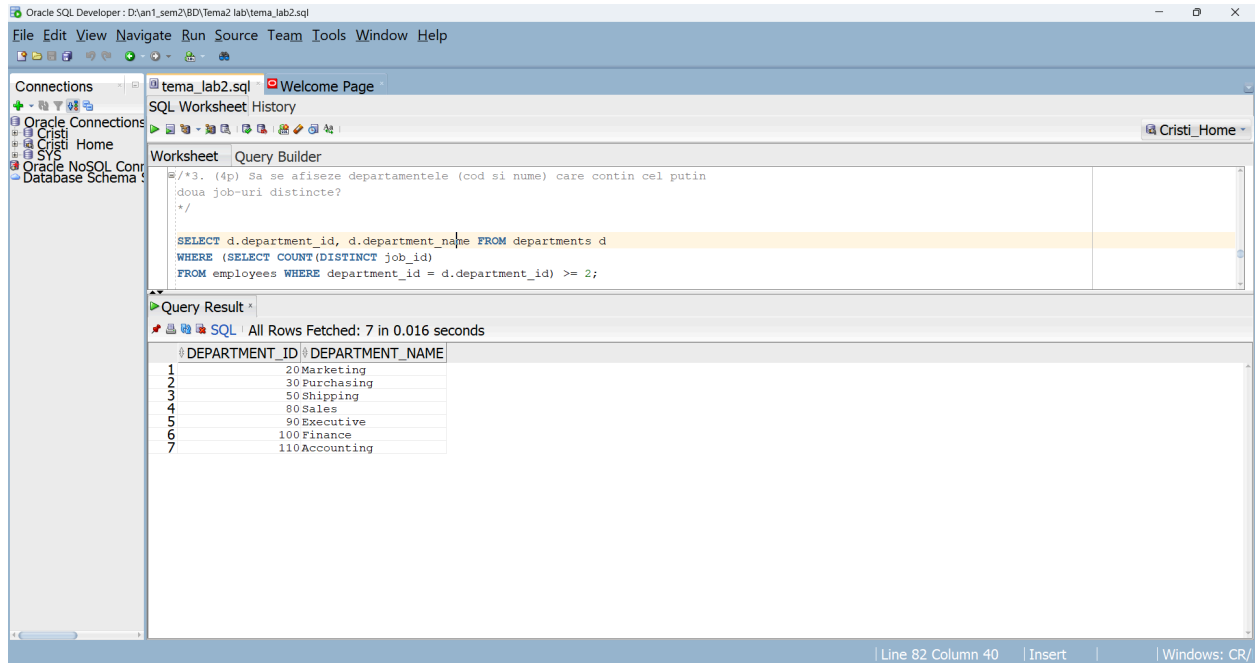
/\*c)\*/

```
SELECT 'salariul minim, pentru fiecare din celelalte job-uri: ' || to_char(MIN(salary)) FROM  
employees e  
JOIN celalalte_joburi cj ON e.job_id = cj.job_id  
GROUP BY cj.job_id;
```



/\*3. (4p) Sa se afiseze departamentele (cod si nume) care contin cel putin  
doua job-uri distincte?  
\*/

```
SELECT d.department_id, d.department_name FROM departments d  
WHERE (SELECT COUNT(DISTINCT job_id)  
FROM employees WHERE department_id = d.department_id) >= 2;
```



/\*

4. (8p) Sa se listeze pentru fiecare angajat orasul in care a lucrat cele mai multe zile (VEZI exemplul de mai jos).

\*/

/\*Determin pt fiecare employee nr de zile lucrate per oras\*/

CREATE VIEW emp\_oras AS

SELECT e.employee\_id, l.city,

nvl(SUM(j.end\_date - j.start\_date) + TRUNC(SYSDATE - e.hire\_date),

TRUNC(SYSDATE - e.hire\_date)) TIME\_SPENT

FROM locations l

JOIN departments d ON d.location\_id = l.location\_id

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

LEFT JOIN job\_history j ON e.employee\_id = j.employee\_id

GROUP BY l.city, e.employee\_id, e.hire\_date;

/\*Aleg orasul in care a lucrat cel mai mult\*/

SELECT eo.employee\_id, eo.city, eo.time\_spent FROM emp\_oras eo

WHERE eo.time\_spent =

(SELECT MAX(TIME\_SPENT) FROM emp\_oras

WHERE eo.employee\_id = employee\_id);

Oracle SQL Developer: D:\an1\_sen2\BD\Tema2 lab\tema\_lab2.sql

File Edit View Navigate Run Source Team Tools Window Help

Connections | tema\_lab2.sql | Welcome Page

SQL Worksheet History

Worksheet Query Builder

Query Result x

SQL All Rows Fetched: 106 in 0.013 seconds

	EMPLOYEE_ID	CITY	TIME_SPENT
78	126	South San Francisco	9376
79	128	South San Francisco	8849
80	130	South San Francisco	9709
81	167	Oxford	8805
82	171	Oxford	9228
83	111	Seattle	9739
84	144	South San Francisco	9457
85	181	South San Francisco	9593
86	119	Seattle	9060
87	133	South San Francisco	10212
88	153	Oxford	9558
89	164	Oxford	8893
90	193	South San Francisco	9950
91	132	South San Francisco	9182
92	139	South San Francisco	9604
93	154	Oxford	9304
94	165	Oxford	8863
95	192	South San Francisco	10343
96	205	Seattle	10950
97	100	Seattle	13497
98	123	South San Francisco	9729
99	175	Oxford	9934
100	106	Southlake	9611
101	138	South San Francisco	9713
102	147	Oxford	9943
103	150	Oxford	9982
104	117	Seattle	9807
105	160	Oxford	9663
106	182	South San Francisco	9110

Line 104 Column 26 | Insert | Windows: CR/