**Tema laborator 7**

--E1

-- d

DECLARE

TYPE refcursor IS REF CURSOR;

CURSOR c IS

SELECT j2.job\_title, CURSOR

(SELECT e.last\_name, e.first\_name, e.salary

FROM employees e, jobs j

WHERE j.job\_id = e.job\_id AND

j.job\_id = j2.job\_id)

FROM jobs j2;

titlu\_job jobs.job\_title%TYPE;

nume\_angajat employees.first\_name%TYPE;

prenume\_angajat employees.last\_name%TYPE;

salariu employees.salary%TYPE;

referinta\_cursor refcursor;

counter NUMBER(5);

BEGIN

OPEN c;

LOOP

FETCH c INTO titlu\_job, referinta\_cursor;

EXIT WHEN c%NOTFOUND;

DBMS\_OUTPUT.put\_line(titlu\_job);

LOOP

FETCH referinta\_cursor INTO nume\_angajat, prenume\_angajat, salariu;

EXIT WHEN referinta\_cursor%NOTFOUND;

DBMS\_OUTPUT.put\_line(nume\_angajat || ' ' || prenume\_angajat || ' ' || salariu);

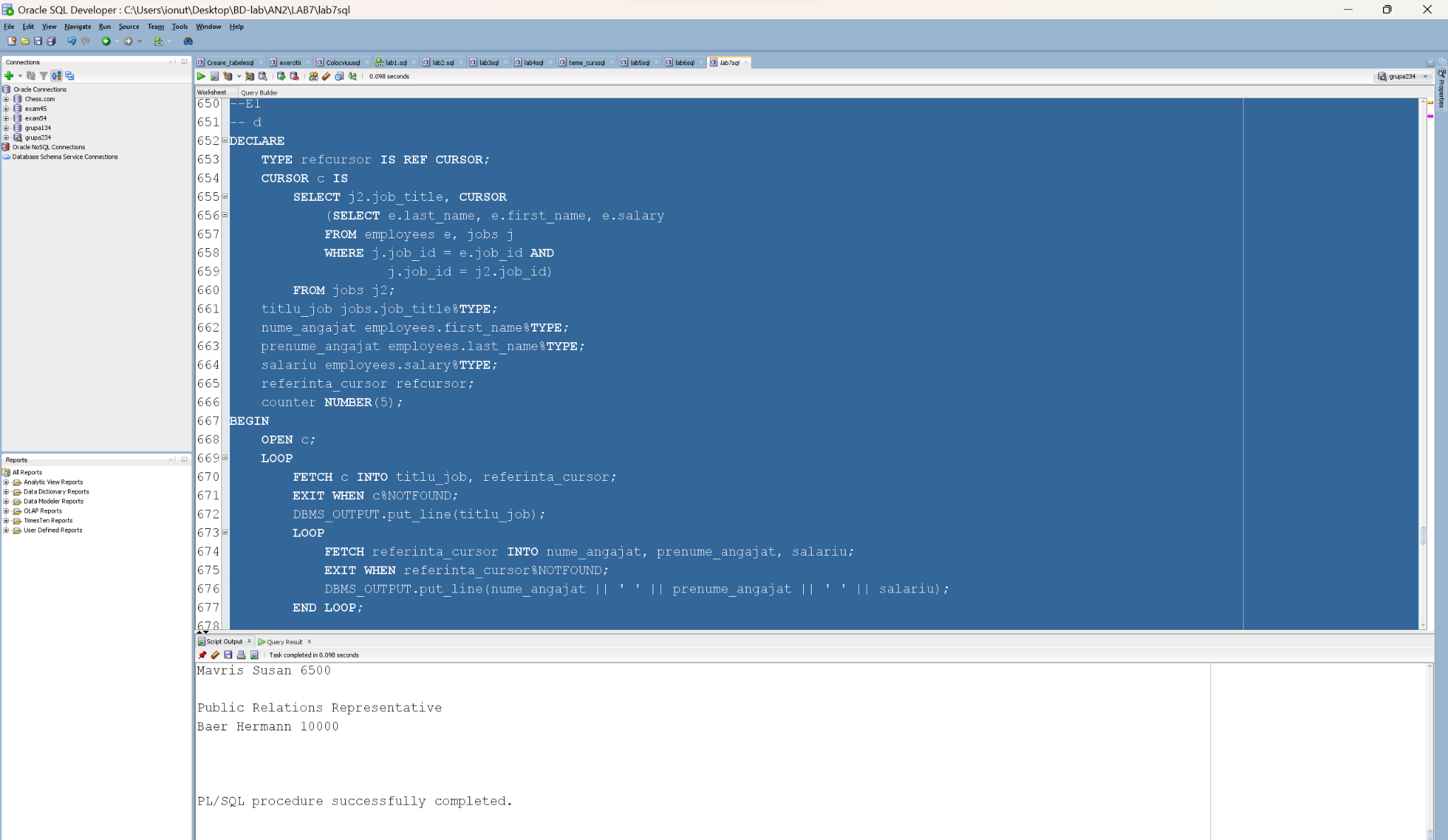
END LOOP;

DBMS\_OUTPUT.new\_line();

END LOOP;

END;

/



--2

DECLARE

TYPE tip\_joburi IS TABLE OF jobs.job\_id%TYPE;

CURSOR c (job\_curent jobs.job\_id%TYPE)IS

SELECT e.last\_name, e.first\_name, e.salary

FROM employees e, jobs j

WHERE j.job\_id = e.job\_id AND

j.job\_id = job\_curent;

numar\_joburi NUMBER;

titlu\_job jobs.job\_title%TYPE;

nume\_angajat employees.first\_name%TYPE;

prenume\_angajat employees.last\_name%TYPE;

salariu employees.salary%TYPE;

joburi tip\_joburi := tip\_joburi();

numar\_salariati NUMBER(5);

counter NUMBER(5);

salariu\_total\_job NUMBER(8,2);

salariu\_mediu\_job NUMBER(8,2);

salariu\_total NUMBER(10,2) := 0;

salariu\_mediu NUMBER(10,2) := 0;

counter\_total NUMBER(5) := 0;

BEGIN

SELECT COUNT(\*) INTO numar\_joburi FROM jobs;

joburi.EXTEND(numar\_joburi);

SELECT j.job\_id BULK COLLECT INTO joburi FROM jobs j;

FOR i IN joburi.FIRST..joburi.LAST LOOP

SELECT job\_title

INTO titlu\_job

FROM jobs j

WHERE j.job\_id = joburi(i);

counter := 0;

salariu\_total\_job := 0;

SELECT count(\*)

INTO numar\_salariati

FROM employees e, jobs j

WHERE e.job\_id = j.job\_id AND

j.job\_id = joburi(i);

IF numar\_salariati = 0 THEN

DBMS\_OUTPUT.put\_line('Niciun angajat ce lucreaza ca ' || titlu\_job);

ELSIF numar\_salariati = 1 THEN

DBMS\_OUTPUT.put\_line('Un angajat ce lucreaza ca ' || titlu\_job);

ELSIF numar\_salariati < 20 THEN

DBMS\_OUTPUT.put\_line(numar\_salariati || ' angajati ce lucreaza ca ' || titlu\_job);

ELSE

DBMS\_OUTPUT.put\_line(numar\_salariati || ' de angajati ce lucreaza ca ' || titlu\_job);

END IF;

OPEN c(joburi(i));

LOOP

FETCH c INTO nume\_angajat, prenume\_angajat, salariu;

EXIT WHEN c%NOTFOUND;

DBMS\_OUTPUT.put\_line(counter + 1 || ' ' || nume\_angajat || ' ' || prenume\_angajat || ' ' || salariu);

counter := counter + 1;

salariu\_total\_job := salariu\_total\_job + salariu;

counter\_total := counter\_total + 1;

END LOOP;

CLOSE c;

salariu\_total := salariu\_total + salariu\_total\_job;

IF counter = 0 THEN

DBMS\_OUTPUT.put\_line('Niciun angajat.');

ELSE

salariu\_mediu\_job := salariu\_total\_job / counter;

DBMS\_OUTPUT.put\_line('Salariul total e ' || salariu\_total\_job || ' cel mediu e ' || salariu\_mediu\_job);

END IF;

DBMS\_OUTPUT.new\_line();

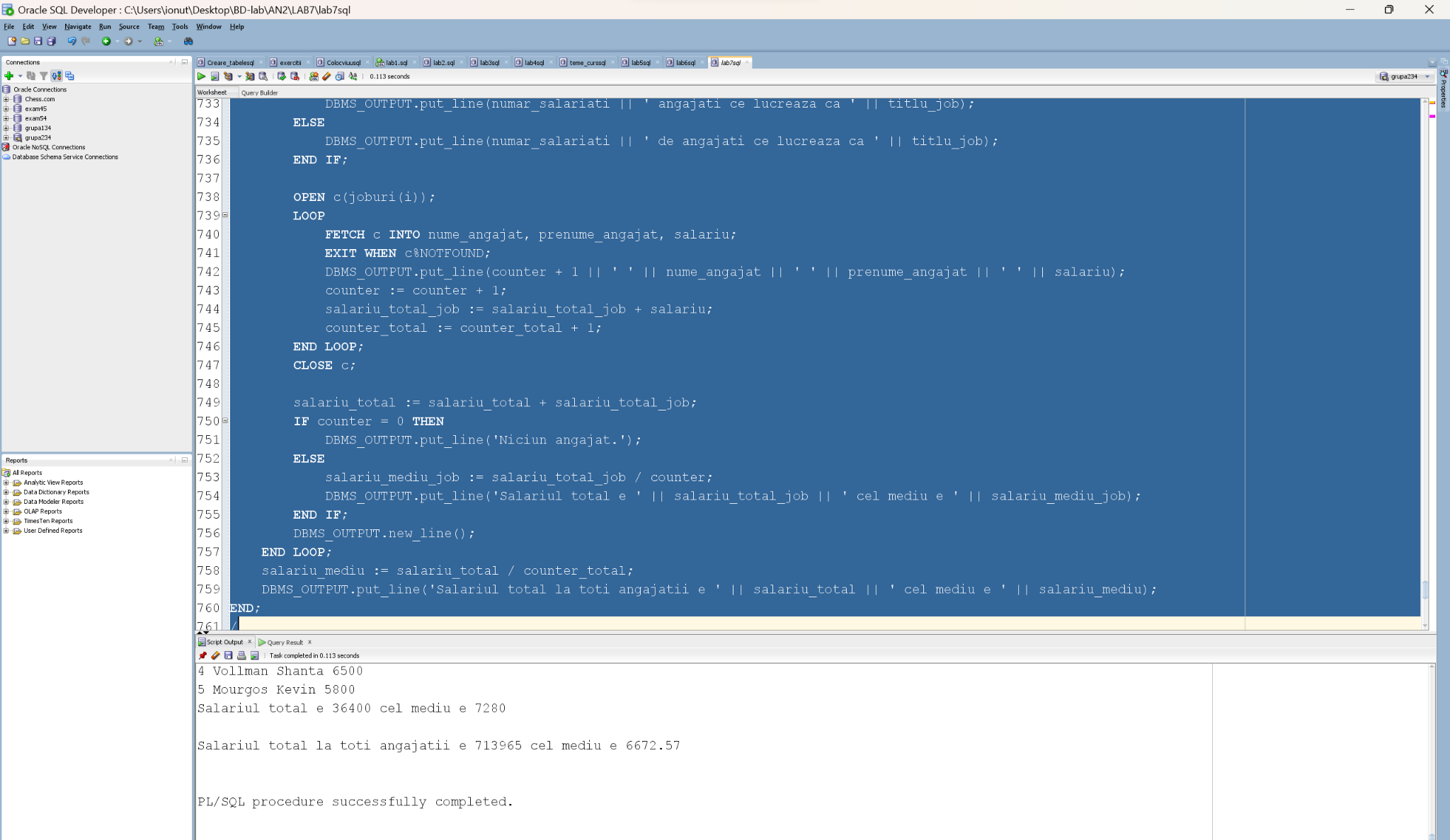
END LOOP;

salariu\_mediu := salariu\_total / counter\_total;

DBMS\_OUTPUT.put\_line('Salariul total la toti angajatii e ' || salariu\_total || ' cel mediu e ' || salariu\_mediu);

END;

/



--6

DECLARE

CURSOR c\_util IS (SELECT \*

FROM utilizatori

WHERE id\_utilizator IN (1,2,3,4));

CURSOR c\_utilizator (u\_id utilizatori.id\_utilizator%TYPE) IS (SELECT \* FROM utilizatori

WHERE id\_utilizator = u\_id);

u\_id utilizatori%ROWTYPE;

u\_utilizator employees%ROWTYPE;

BEGIN

OPEN c\_util;

LOOP

FETCH c\_util INTO u\_id;

EXIT WHEN c\_util%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE(u\_id.nume\_utilizator);

OPEN c\_utilizator(u\_id.id\_utilizator);

LOOP

FETCH c\_utilizator INTO u\_utilizator;

EXIT WHEN c\_utilizator%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE(u\_utilizator.id\_utilizator);

END LOOP;

CLOSE c\_utilizator;

END LOOP;

CLOSE c\_util;

END;

/

