**Tema laborator 8**

E3) Modificați exercițiul anterior astfel încât să obțineți suma totală alocată lunar pentru plata salariilor și a comisioanelor tuturor angajaților, iar pentru fiecare angajat cât la sută din această sumă câștigă lunar.

--E3

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, e.commission\_pct

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;

procentaj\_comision NUMBER(5) := 0;

total\_cu\_comision NUMBER(10,2) := 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);

SELECT SUM(salary) + SUM(salary\*commission\_pct)

INTO total\_cu\_comision

FROM EMPLOYEES;

IF numar\_salariati = 0 THEN

DBMS\_OUTPUT.put\_line('Niciun angajat pe ' || titlu\_job);

ELSIF numar\_salariati = 1 THEN

DBMS\_OUTPUT.put\_line('Un angajat pe ' || titlu\_job);

ELSIF numar\_salariati < 20 THEN

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

ELSE

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

END IF;

OPEN c(joburi(i));

LOOP

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

EXIT WHEN c%NOTFOUND;

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

salariu || ' ' ||

TO\_CHAR(((salariu + (salariu \* nvl(procentaj\_comision, 0))) \* 100 / total\_cu\_comision), '0.00'));

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 ang.');

ELSE

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

DBMS\_OUTPUT.put\_line('Salariul total angajati '

|| salariu\_total\_job || ' cel mediu e ' || salariu\_mediu\_job);

END IF;

DBMS\_OUTPUT.new\_line();

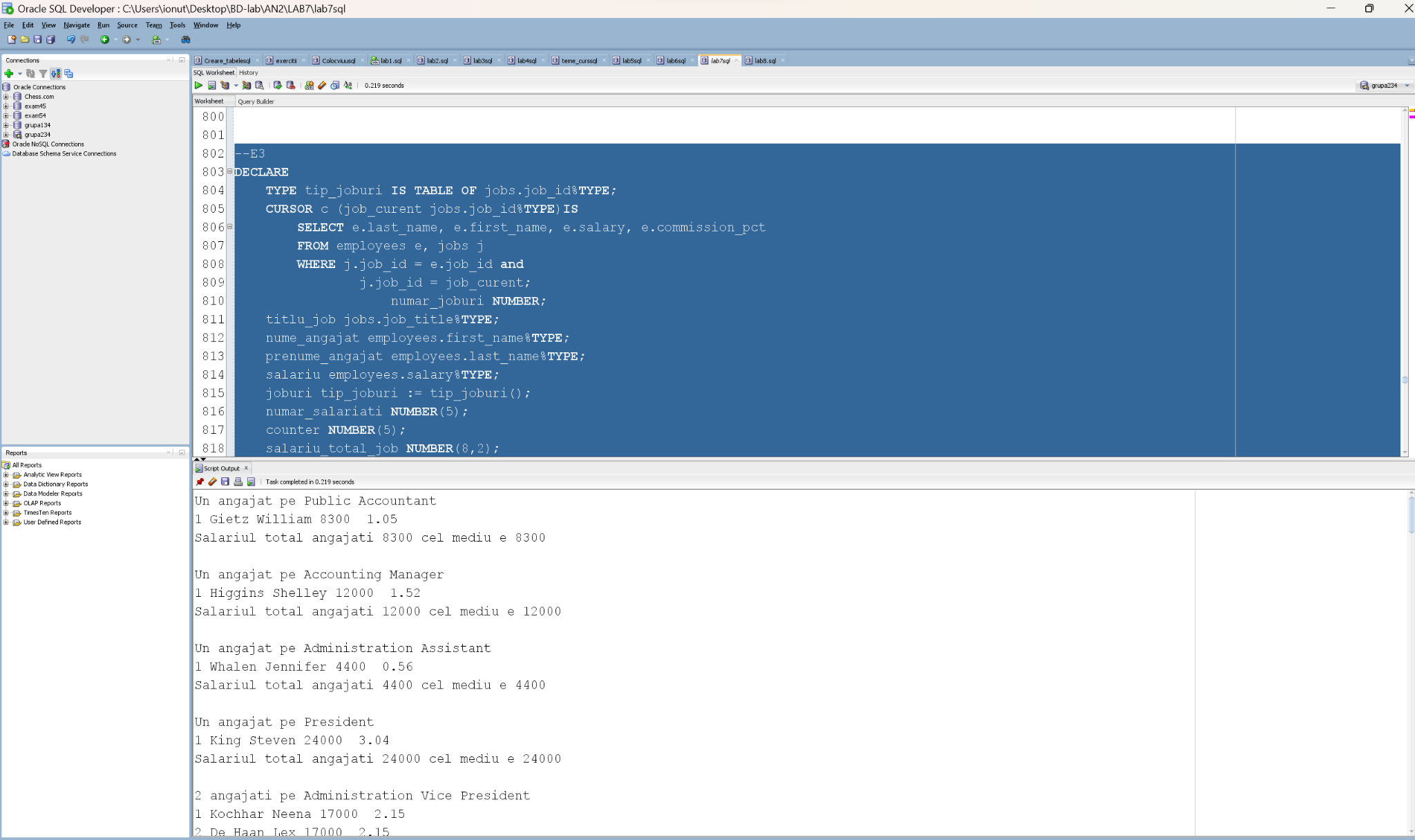
END LOOP;

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

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

END;

/



E4) Modificați exercițiul anterior astfel încât să obțineți pentru fiecare job primii 5 angajați care câștigă cel mai mare salariu lunar. Specificați dacă pentru un job sunt mai puțin de 5 angajați.

--E4

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, e.commission\_pct

FROM employees e, jobs j

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

j.job\_id = job\_curent

ORDER BY e.salary DESC;

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;

procentaj\_comision NUMBER(5) := 0;

total\_cu\_comision NUMBER(10,2) := 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

counter := 0;

SELECT job\_title

INTO titlu\_job

FROM jobs j

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

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 < 5 THEN

DBMS\_OUTPUT.put\_line('Mai putin de 5 ang pe ' || titlu\_job);

ELSE

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

END IF;

OPEN c(joburi(i));

LOOP

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

EXIT WHEN c%NOTFOUND OR c%ROWCOUNT > 5;

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

counter := counter + 1;

END LOOP;

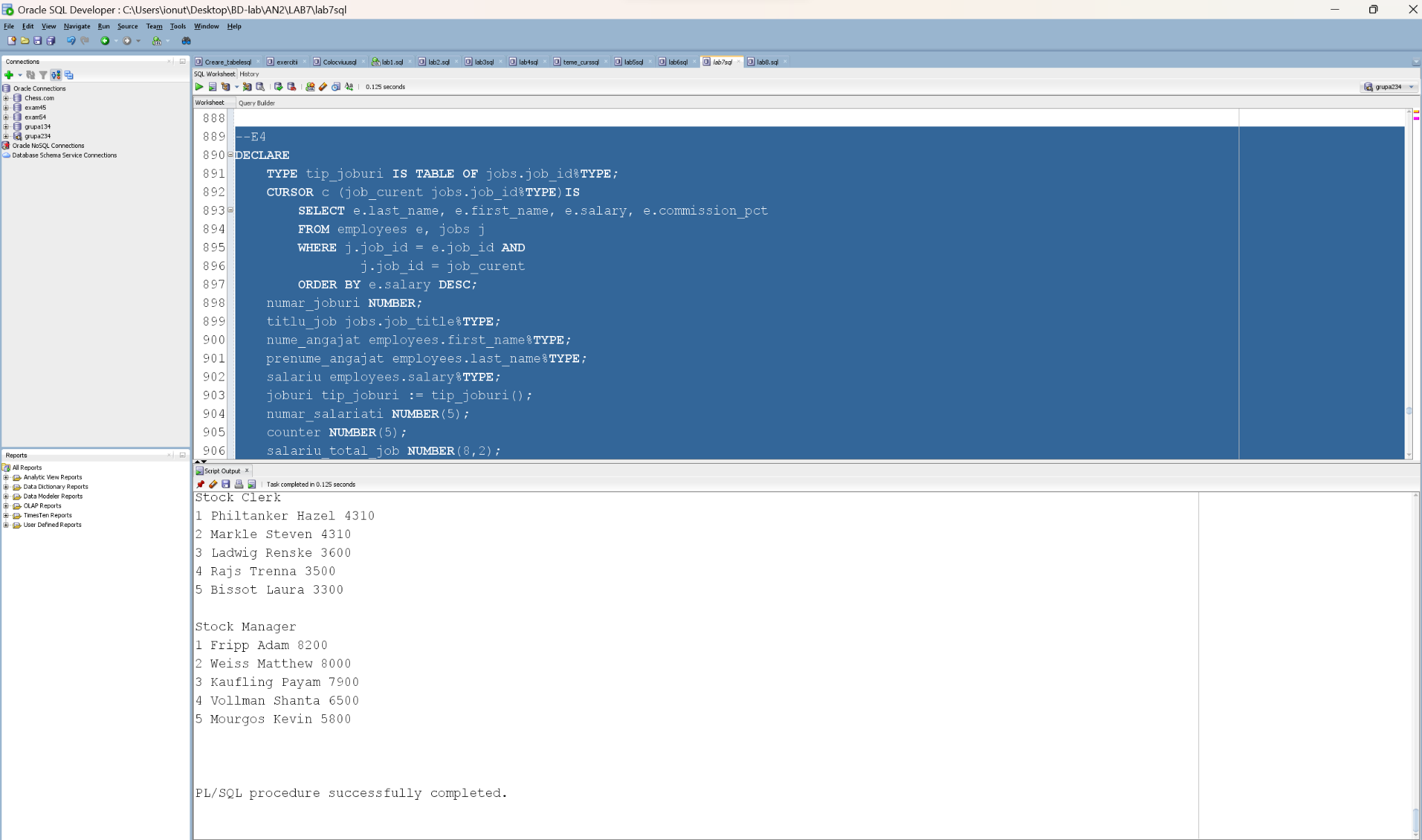
CLOSE c;

DBMS\_OUTPUT.new\_line();

END LOOP;

END;

/



E5) Modificați exercițiul anterior astfel încât să obțineți pentru fiecare job top 5 angajați. Dacă există mai mulți angajați care respectă criteriul de selecție care au același salariu, atunci aceștia vor ocupa aceeași poziție în top 5.

--E5

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, e.commission\_pct

FROM employees e, jobs j

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

j.job\_id = job\_curent

ORDER BY e.salary DESC;

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;

procentaj\_comision NUMBER(5) := 0;

total\_cu\_comision NUMBER(10,2) := 0;

salariu\_angajat employees.salary%TYPE;

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

salariu\_angajat := 0;

counter := 0;

SELECT job\_title

INTO titlu\_job

FROM jobs j

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

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 < 5 THEN

DBMS\_OUTPUT.put\_line('Mai putin de 5 ang pe ' || titlu\_job);

ELSE

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

END IF;

OPEN c(joburi(i));

LOOP

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

EXIT WHEN c%NOTFOUND or c%ROWCOUNT > 5;

IF salariu\_angajat = 0 or salariu <> salariu\_angajat THEN

salariu\_angajat := salariu;

counter := counter + 1;

END IF;

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

END LOOP;

CLOSE c;

DBMS\_OUTPUT.new\_line();

END LOOP;

END;

/

