**Упражнение 7**

SET VERIFY OFF

---

SET ECHO OFF

----

DECLARE

v\_deptno NUMBER := 10;

CURSOR c\_emp\_cursor IS

SELECT last\_name, salary, manager\_id FROM employees WHERE department\_id = v\_deptno;

BEGIN

FOR emp\_record IN c\_emp\_cursor

LOOP

IF emp\_record.salary < 5000 AND (emp\_record.manager\_id=101 OR emp\_record.manager\_id=124) THEN

DBMS\_OUTPUT.PUT\_LINE (emp\_record.last\_name || ' Due for a raise');

ELSE

DBMS\_OUTPUT.PUT\_LINE (emp\_record.last\_name || ' Not Due for a raise');

END IF;

END LOOP;

END;



DECLARE

CURSOR c\_dept\_cursor IS

SELECT department\_id, department\_name FROM departments WHERE department\_id < 100

ORDER BY department\_id;

CURSOR c\_emp\_cursor(v\_deptno NUMBER ) IS

SELECT last\_name, job\_id, hire\_date, salary FROM employees WHERE department\_id = v\_deptno

AND employee\_id < 120;

v\_current\_deptno departments.department\_id%TYPE;

v\_current\_dname departments.department\_name%TYPE;

v\_ename employees.last\_name%TYPE;

v\_job employees.job\_id%TYPE;

v\_hiredate employees.hire\_date%TYPE;

v\_sal employees.salary%TYPE;

BEGIN

OPEN c\_dept\_cursor;

LOOP

FETCH c\_dept\_cursor INTO v\_current\_deptno, v\_current\_dname;

EXIT WHEN c\_dept\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE ('Department Number : ' || v\_current\_deptno ||

' Department Name : ' || v\_current\_dname);

IF c\_emp\_cursor%ISOPEN THEN

CLOSE c\_emp\_cursor;

END IF;

OPEN c\_emp\_cursor (v\_current\_deptno);

LOOP

FETCH c\_emp\_cursor INTO v\_ename, v\_job,v\_hiredate,v\_sal;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE (v\_ename || ' ' || v\_job || ' ' || v\_hiredate || ' ' || v\_sal);

END LOOP;

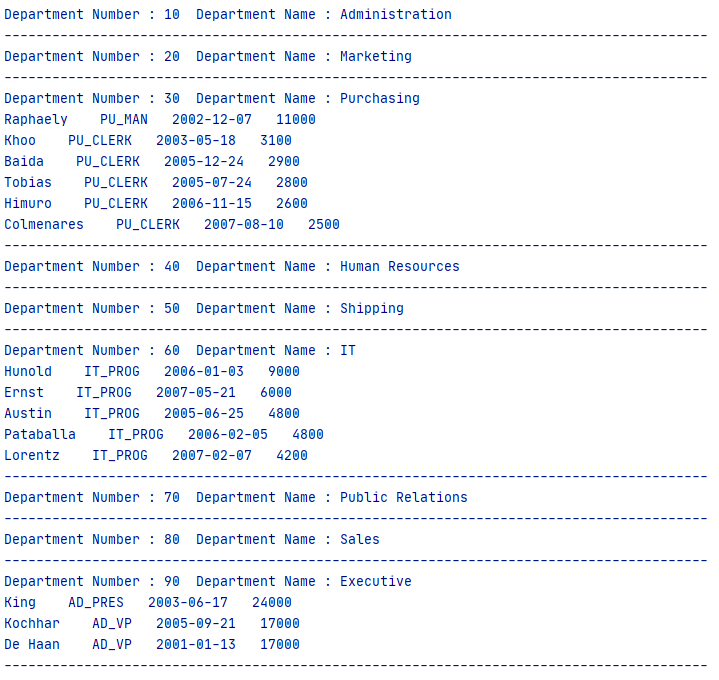
DBMS\_OUTPUT.PUT\_LINE('----------------------------------------------------------------------------------------');

CLOSE c\_emp\_cursor;

END LOOP;

CLOSE c\_dept\_cursor;

END;



SET VERIFY OFF

---

DELETE FROM top\_salaries; -- Изтрива записи от таблицата, ако я има

---

CREATE TABLE top\_salaries (salary NUMBER(8,2)); -- Създава таблица, ако я няма

Въвежда в таблица top\_salaries първите 5 най-големи заплати

DECLARE

v\_num NUMBER(3) := 5;

v\_sal employees.salary%TYPE;

CURSOR c\_emp\_cursor IS

SELECT salary FROM employees ORDER BY salary DESC;

BEGIN

OPEN c\_emp\_cursor;

FETCH c\_emp\_cursor INTO v\_sal;

WHILE c\_emp\_cursor%ROWCOUNT <= v\_num AND c\_emp\_cursor%FOUND LOOP

INSERT INTO top\_salaries (salary) VALUES (v\_sal);

FETCH c\_emp\_cursor INTO v\_sal;

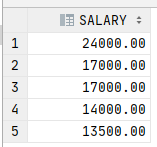
END LOOP;

CLOSE c\_emp\_cursor;

END;

---

SELECT \* FROM top\_salaries;



Създайте таблица emp.

DROP TABLE emp; -- Изтрива таблицата, ако я има

CREATE TABLE emp AS SELECT \* FROM EMPLOYEES;



PL/SQL код, който за служители с длъжност **'ST\_CLERK'** и със заплата по-голяма от 3000 променя длъжността им на **'SR\_CLERK'** и повишава заплатата им с 10%.Проверете резултатите в таблица emp.

Използва секурсор сFOR UPDATE и клаузата CURRENT OF за обновяването.

**DECLARE**

**CURSOR C\_Senior\_Clerk IS**

**SELECT employee\_id,job\_id FROM emp**

**WHERE job\_id = 'ST\_CLERK' AND salary > 3000**

**FOR UPDATE OF job\_id;**

**BEGIN**

**FOR Emrec IN C\_Senior\_Clerk**

**LOOP**

**UPDATE emp**

**SET job\_id = 'SR\_CLERK',**

**salary = 1.1 \* salary**

**WHERE CURRENT OF C\_Senior\_Clerk;**

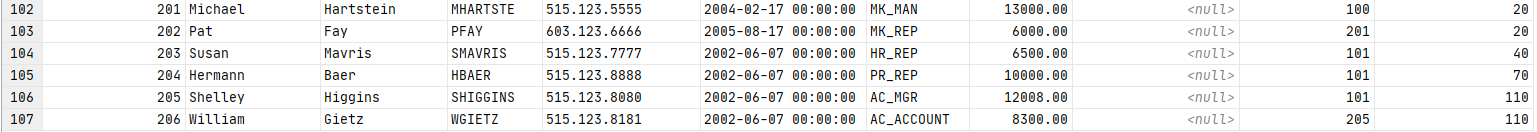
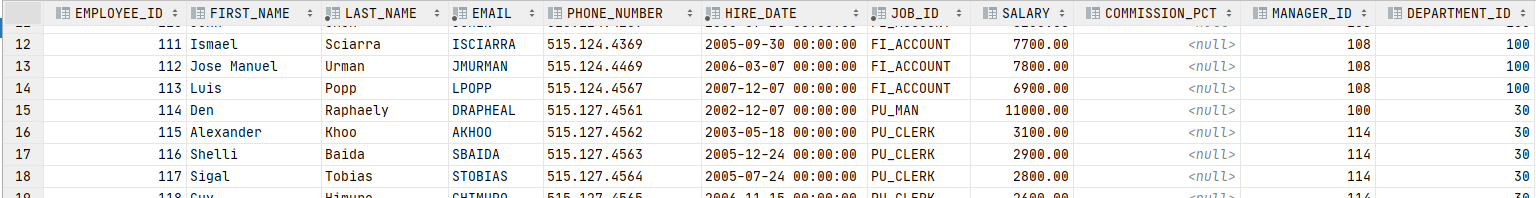
**END LOOP;**

**COMMIT;**

**END;**

---

**SELECT \* FROM emp;**



**Примери от теорията:**

DECLARE

CURSOR c\_emp\_cursor IS

SELECT employee\_id, last\_name FROM employees

WHERE department\_id =30;

v\_empno employees.employee\_id%TYPE;

v\_lname employees.last\_name%TYPE;

BEGIN

OPEN c\_emp\_cursor;

FETCH c\_emp\_cursor INTO v\_empno, v\_lname;

DBMS\_OUTPUT.PUT\_LINE( v\_empno ||' '||v\_lname);

END;



DECLARE

CURSOR c\_emp\_cursor IS

SELECT employee\_id, last\_name FROM employees

WHERE department\_id =30;

v\_empno employees.employee\_id%TYPE;

v\_lname employees.last\_name%TYPE;

BEGIN

OPEN c\_emp\_cursor;

LOOP

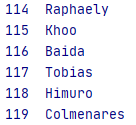
FETCH c\_emp\_cursor INTO v\_empno, v\_lname;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE( v\_empno ||' '||v\_lname);

END LOOP;

END;



DECLARE

CURSOR c\_emp\_cursor IS

SELECT employee\_id, last\_name FROM employees

WHERE department\_id =30;

v\_emp\_record c\_emp\_cursor%ROWTYPE;

BEGIN

OPEN c\_emp\_cursor;

LOOP

FETCH c\_emp\_cursor INTO v\_emp\_record;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE( v\_emp\_record.employee\_id ||' '||v\_emp\_record.last\_name);

END LOOP;

CLOSE c\_emp\_cursor;

END;



DECLARE

CURSOR c\_emp\_cursor IS

SELECT employee\_id, last\_name FROM employees

WHERE department\_id =30;

BEGIN

FOR emp\_record IN c\_emp\_cursor

LOOP

DBMS\_OUTPUT.PUT\_LINE( emp\_record.employee\_id ||' '||emp\_record.last\_name);

END LOOP;

END;



DECLARE

CURSOR c\_emp\_cursor IS SELECT employee\_id,

last\_name FROM employees;

v\_emp\_record c\_emp\_cursor%ROWTYPE;

BEGIN

OPEN c\_emp\_cursor;

LOOP

FETCH c\_emp\_cursor INTO v\_emp\_record;

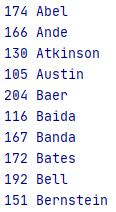
EXIT WHEN c\_emp\_cursor%ROWCOUNT > 10 OR c\_emp\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE( v\_emp\_record.employee\_id ||' '||v\_emp\_record.last\_name);

END LOOP;

CLOSE c\_emp\_cursor;

END ;



BEGIN

FOR emp\_record IN (SELECT employee\_id, last\_name FROM employees

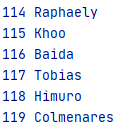
WHERE department\_id =30)

LOOP

DBMS\_OUTPUT.PUT\_LINE( emp\_record.employee\_id ||' '||emp\_record.last\_name);

END LOOP;

END;



DECLARE

CURSOR c\_emp\_cursor (deptno NUMBER) IS

SELECT employee\_id, last\_name FROM employees WHERE department\_id = deptno;

v\_empno employees.employee\_id%TYPE;

v\_lname employees.last\_name%TYPE;

BEGIN

OPEN c\_emp\_cursor (10);

LOOP

FETCH c\_emp\_cursor INTO v\_empno, v\_lname;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE( v\_empno ||' '||v\_lname);

END LOOP;

CLOSE c\_emp\_cursor;

OPEN c\_emp\_cursor (20);

LOOP

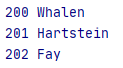
FETCH c\_emp\_cursor INTO v\_empno, v\_lname;

EXIT WHEN c\_emp\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE( v\_empno ||' '||v\_lname);

END LOOP;

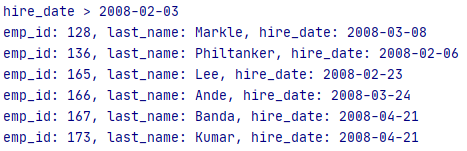
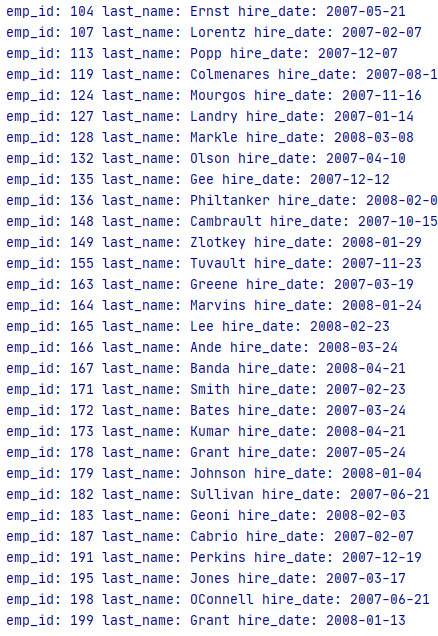
END;



----------------------------------------------------------------

**Зад. 1.** Създайте PL/SQL блок с декларация на курсор, с име C\_DATE\_CUR, полета – номер, фамилия и дата на постъпване; както и параметър на курсора от даннов тип DATE.Изведете информация за всички служители, които са постъпили на работа след определена дата, въведена от клавиатурата. Тествайте с дати 2007-01-01, 2008-02-03.

hire\_date > 2007-01-01



**Зад. 2.** Изведете за всеки идентификатор и име на страна, данните за всички локации за страната. Използвайте два курсора, като вторият курсор приема като параметър идентификатора на страната.

