**Упражнение 6**

DECLARE

type t\_rec is record

(v\_sal number(8), v\_minsal number(8) default 1000,

v\_hire\_date employees.hire\_date%type, v\_rec1 employees%rowtype);

v\_myrec t\_rec;

BEGIN

v\_myrec.v\_sal := v\_myrec.v\_minsal + 500;

v\_myrec.v\_hire\_date := sysdate;

SELECT \* INTO v\_myrec.v\_rec1

FROM employees WHERE employee\_id = 100;

DBMS\_OUTPUT.PUT\_LINE(v\_myrec.v\_rec1.last\_name ||' '||

to\_char(v\_myrec.v\_hire\_date) ||' '|| to\_char(v\_myrec.v\_sal));

END;

SET VERIFY OFF

DROP TABLE retired\_emps; -- **изтриване на таблица retired\_emps**

----

CREATE TABLE retired\_emps -- **създаване на таблица retired\_emps**

(EMPNO NUMBER(4), ENAME VARCHAR2(10), JOB VARCHAR2(9),

MGR NUMBER(4), HIREDATE DATE, LEAVEDATE DATE, SAL NUMBER(7,2),

COMM NUMBER(7,2), DEPTNO NUMBER(2));

----

DECLARE

v\_employee\_number number:= 124;

v\_emp\_rec employees%ROWTYPE;

BEGIN

SELECT \* INTO v\_emp\_rec FROM employees

WHERE employee\_id = v\_employee\_number;

INSERT INTO retired\_emps(empno, ename, job, mgr, hiredate, leavedate, sal, comm, deptno)

VALUES (v\_emp\_rec.employee\_id, v\_emp\_rec.last\_name,

v\_emp\_rec.job\_id, v\_emp\_rec.manager\_id, v\_emp\_rec.hire\_date, SYSDATE,

v\_emp\_rec.salary, v\_emp\_rec.commission\_pct, v\_emp\_rec.department\_id);

END;

------

SELECT \* FROM retired\_emps; -- **извеждане на данни от таблица retired\_emps**

SET VERIFY OFF

DROP TABLE retired\_emps; -- **изтриване на таблица retired\_emps**

----

/\*създаване на таблица retired\_emps\*/

CREATE TABLE retired\_emps (EMPNO NUMBER(4), ENAME VARCHAR2(10), JOB VARCHAR2(9), MGR NUMBER(4),

HIREDATE DATE, LEAVEDATE DATE, SAL NUMBER(7,2), COMM NUMBER(7,2), DEPTNO NUMBER(2));

----

DECLARE

v\_employee\_number number:= 124;

v\_emp\_rec retired\_emps%ROWTYPE;

BEGIN

SELECT employee\_id, last\_name, job\_id, manager\_id, hire\_date, hire\_date, salary, commission\_pct, department\_id

INTO v\_emp\_rec FROM employees

WHERE employee\_id = v\_employee\_number;

INSERT INTO retired\_emps VALUES v\_emp\_rec;

END;

----

SELECT \* FROM retired\_emps;

SET VERIFY OFF

---

DECLARE

v\_employee\_number number:= 124;

v\_emp\_rec retired\_emps%ROWTYPE;

BEGIN

SELECT \* INTO v\_emp\_rec FROM retired\_emps;

v\_emp\_rec.leavedate:=CURRENT\_DATE;

UPDATE retired\_emps SET ROW = v\_emp\_rec WHERE empno=v\_employee\_number;

END;

----

SELECT \* FROM retired\_emps; -- извеждане на данни от таблица retired\_emps

drop table empl; -- **изтриване на таблица empl**

---

create table empl( ename VARCHAR2(25 BYTE), hiredt date); -- **създаване на таблица empl**

---

DECLARE

TYPE ename\_table\_type

IS

TABLE OF employees.last\_name%TYPE INDEX BY PLS\_INTEGER;

TYPE hiredate\_table\_type

IS

TABLE OF DATE INDEX BY PLS\_INTEGER;

ename\_table ename\_table\_type;

hiredate\_table hiredate\_table\_type;

BEGIN

ename\_table(1) := 'CAMERON';

hiredate\_table(8) := SYSDATE + 7;

IF ename\_table.EXISTS(1) THEN

insert into empl VALUES (ename\_table(1), hiredate\_table(8));

END IF;

END;

---

select \* from empl; -- **извеждане на данни от таблица empl**

DECLARE

TYPE dept\_table\_type

IS

TABLE OF departments%ROWTYPE INDEX BY VARCHAR2(20);

dept\_table dept\_table\_type;

-- всеки елемент на dept\_table е запис със структура като таблица departments

BEGIN

SELECT \* INTO dept\_table(1) FROM departments WHERE department\_id = 10;

DBMS\_OUTPUT.PUT\_LINE( dept\_table(1).department\_name);

END;

DECLARE

TYPE emp\_table\_type is table of

employees%ROWTYPE INDEX BY PLS\_INTEGER; --

my\_emp\_table emp\_table\_type; -- структура като таблица employees

max\_count NUMBER(3):= 104;

BEGIN

FOR i IN 100..max\_count

LOOP

SELECT \* INTO my\_emp\_table(i) FROM employees

WHERE employee\_id = i;

END LOOP;

FOR i IN my\_emp\_table.FIRST..my\_emp\_table.LAST

LOOP

DBMS\_OUTPUT.PUT\_LINE(my\_emp\_table(i).last\_name);

END LOOP;

END;

DECLARE

TYPE location\_type IS TABLE OF locations.city%TYPE;

offices location\_type;

table\_count NUMBER;

BEGIN

offices := location\_type('Bombay', 'Tokyo','Singapore', 'Oxford');

FOR i in 1..offices.count() LOOP

DBMS\_OUTPUT.PUT\_LINE(offices(i));

END LOOP;

END;

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

SET VERIFY OFF

DECLARE

v\_countryid varchar2(20):= 'ca';

v\_country\_record countries%ROWTYPE;

BEGIN

SELECT \* INTO v\_country\_record FROM countries

WHERE country\_id = UPPER(v\_countryid);

DBMS\_OUTPUT.PUT\_LINE ('Country Id: ' || v\_country\_record.country\_id ||

' Country Name: ' || v\_country\_record.country\_name || ' Region: ' || v\_country\_record.region\_id);

END;

DECLARE

TYPE dept\_table\_type is table of departments.department\_name%TYPE

INDEX BY PLS\_INTEGER;

my\_dept\_table dept\_table\_type;

f\_loop\_count NUMBER (2):=10;

v\_deptno NUMBER (4):=0;

BEGIN

FOR i IN 1..f\_loop\_count

LOOP

v\_deptno:=v\_deptno+10;

SELECT department\_name INTO my\_dept\_table(i)

FROM departments

WHERE department\_id = v\_deptno;

END LOOP;

FOR i IN 1..f\_loop\_count

LOOP

DBMS\_OUTPUT.PUT\_LINE (my\_dept\_table(i));

END LOOP;

END;

DECLARE

TYPE dept\_table\_type is table of departments%ROWTYPE

INDEX BY PLS\_INTEGER;

my\_dept\_table dept\_table\_type;

f\_loop\_count NUMBER (2):=10;

v\_deptno NUMBER (4):=0;

BEGIN

FOR i IN 1..f\_loop\_count

LOOP

v\_deptno := v\_deptno + 10;

SELECT \* INTO my\_dept\_table(i)

FROM departments

WHERE department\_id = v\_deptno;

END LOOP;

FOR i IN 1..f\_loop\_count

LOOP

DBMS\_OUTPUT.PUT\_LINE ('Department Number: ' || my\_dept\_table(i).department\_id

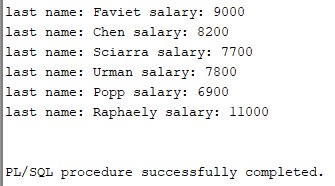
|| ' Department Name: ' || my\_dept\_table(i).department\_name

|| ' Manager Id: '|| my\_dept\_table(i).manager\_id || ' Location Id: ' || my\_dept\_table(i).location\_id);

END LOOP;

END;in

**Зад. 1.** Създайте PL/SQL блок за извличане на last name и salary за всеки служител от таблица employees с EMPLOYEE\_ID по-малко от 115. Със стойностите, извлечени от таблица employees, попълнете две PL/SQL таблици, една за съхраняване на фамилиите и друга за съхраняване на заплатите. Изведете информацията от двете PL/SQL таблици.



**Зад. 2.** Създайте PL/SQL блок за извличане на всички данни за служители от таблица employees с EMPLOYEE\_ID между 104 и 108. Със стойностите, извлечени от таблица employees, попълнете PL/SQL таблица като заплата по-малка от 5000, да се увеличи с 200. Изведете информация от PL/SQL таблицата за номер, фамилия и заплата на служител.