

```
SELECT * FROM DEPARTMENTS;
```

```
DECLARE
```

```
    numer_max departments.department_id%TYPE;
```

```
    nowy_numer departments.department_id%TYPE;
```

```
    nazwa departments.department_name%TYPE := 'Development';
```

```
BEGIN
```

```
    SELECT MAX(department_id) INTO numer_max FROM DEPARTMENTS;
```

```
    nowy_numer := numer_max + 10;
```

```
    INSERT INTO DEPARTMENTS(department_id, department_name)
```

```
        VALUES (nowy_numer, nazwa);
```

```
END;
```

```
/
```

```
SELECT * FROM DEPARTMENTS;
```

```
DELETE FROM DEPARTMENTS WHERE DEPARTMENT_ID = 280;
```

```
DECLARE
```

```
    numer_max departments.department_id%TYPE;
```

```
    nowy_numer departments.department_id%TYPE;
```

```
    nazwa departments.department_name%TYPE := 'Development';
```

```
BEGIN
```

```
    SELECT MAX(department_id) INTO numer_max FROM DEPARTMENTS;
```

```
    nowy_numer := numer_max + 10;
```

```
    INSERT INTO DEPARTMENTS(department_id, department_name)
```

```
        VALUES (nowy_numer, nazwa);
```

```
UPDATE departments SET location_id = 3000
```

```
WHERE department_id = nowy_numer;
```

```
END;
```

```
/
```

```
CREATE TABLE nowa_tabela (tekst VARCHAR2(10));
```

```
BEGIN
```

```
FOR i IN 1..10 LOOP
```

```
IF i NOT IN (4, 6) THEN
```

```
INSERT INTO nowa_tabela (tekst)
```

```
VALUES (TO_CHAR(i));
```

```
END IF;
```

```
END LOOP;
```

```
END;
```

```
/
```

```
SELECT * FROM nowa_tabela;
```

```
SELECT * FROM COUNTRIES;
```

```
SET SERVEROUTPUT ON;
```

```
DECLARE
```

```
kraj countries%ROWTYPE;
```

```
BEGIN
```

```
SELECT * INTO kraj FROM COUNTRIES
```

```
        WHERE country_id = 'CA';

DBMS_OUTPUT.PUT_LINE('Nazwa kraju: ' || kraj.country_name);

DBMS_OUTPUT.PUT_LINE('Region ID: ' || kraj.region_id);

END;

/


SELECT * FROM EMPLOYEES;


DECLARE

    CURSOR pracownicy_cursor IS

        SELECT last_name, salary FROM EMPLOYEES

            WHERE department_id = 50;

    v_nazwisko employees.last_name%TYPE;

    v_wynagrodz employees.salary%TYPE;

BEGIN

    OPEN pracownicy_cursor;

    LOOP

        FETCH pracownicy_cursor INTO v_nazwisko, v_wynagrodz;

        EXIT WHEN pracownicy_cursor%NOTFOUND;

        IF v_wynagrodz > 3100 THEN

            DBMS_OUTPUT.PUT_LINE(v_nazwisko || ' nie dawać podwyżki');

        ELSE

            DBMS_OUTPUT.PUT_LINE(v_nazwisko || ' dać podwyżkę');

        END IF;

    END LOOP;

    CLOSE pracownicy_cursor;

END;
```

/

DECLARE

CURSOR pracownicy\_cursor(p\_min NUMBER, p\_max NUMBER, p\_fragment VARCHAR2) IS

SELECT first\_name, last\_name, salary FROM EMPLOYEES

WHERE salary BETWEEN p\_min AND p\_max AND LOWER(first\_name) LIKE '%' || LOWER(p\_fragment) || '%';

v\_imie employees.first\_name%TYPE;

v\_nazwisko employees.last\_name%TYPE;

v\_zarobki employees.salary%TYPE;

BEGIN

DBMS\_OUTPUT.PUT\_LINE('--- Pracownicy z widełkami 1000–5000 i imieniem zawierającym "a" ---');

OPEN pracownicy\_cursor(1000, 5000, 'a');

LOOP

FETCH pracownicy\_cursor INTO v\_imie, v\_nazwisko, v\_zarobki;

EXIT WHEN pracownicy\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE(v\_imie || ' ' || v\_nazwisko || ' - ' || v\_zarobki);

END LOOP;

CLOSE pracownicy\_cursor;

DBMS\_OUTPUT.PUT\_LINE(CHR(10) || '--- Pracownicy z widełkami 5000–20000 i imieniem zawierającym "u" ---');

OPEN pracownicy\_cursor(5000, 20000, 'u');

LOOP

FETCH pracownicy\_cursor INTO v\_imie, v\_nazwisko, v\_zarobki;

EXIT WHEN pracownicy\_cursor%NOTFOUND;

DBMS\_OUTPUT.PUT\_LINE(v\_imie || ' ' || v\_nazwisko || ' - ' || v\_zarobki);

END LOOP;

CLOSE pracownicy\_cursor;

```
END;
```

```
/
```

```
SELECT * FROM JOBS;
```

```
SELECT * FROM EMPLOYEES;
```

```
CREATE OR REPLACE PROCEDURE dodaj_job (
```

```
    p_job_id jobs.job_id%TYPE,
```

```
    p_job_title jobs.job_title%TYPE
```

```
) AS
```

```
BEGIN
```

```
    INSERT INTO JOBS (job_id, job_title)
```

```
        VALUES (p_job_id, p_job_title);
```

```
    DBMS_OUTPUT.PUT_LINE('Dodano nowy JOB: ' || p_job_id || ' - ' || p_job_title);
```

```
EXCEPTION
```

```
    WHEN OTHERS THEN
```

```
        DBMS_OUTPUT.PUT_LINE('Błąd: ' || SQLERRM);
```

```
END;
```

```
/
```

```
BEGIN
```

```
    dodaj_job('TKI_JOB', 'Somethinger');
```

```
END;
```

```
/
```

```
SELECT * FROM JOBS;
```

```
CREATE OR REPLACE PROCEDURE zmien_job_title (  
  
    p_job_id jobs.job_id%TYPE,  
  
    p_nowy_tytul JOBS.job_title%TYPE  
) AS v_rows_updated NUMBER;  
  
BEGIN  
  
    UPDATE JOBS SET job_title = p_nowy_tytul  
  
        WHERE job_id = p_job_id;  
  
    v_rows_updated := SQL%ROWCOUNT;  
  
    IF v_rows_updated = 0 THEN  
  
        RAISE_APPLICATION_ERROR(-20001, 'Nie zaktualizowano żadnego wiersza – brak JOB_ID');  
  
    ELSE  
  
        DBMS_OUTPUT.PUT_LINE('Zmieniono tytuł stanowiska na: ' || p_nowy_tytul);  
  
    END IF;  
  
EXCEPTION  
  
    WHEN OTHERS THEN  
  
        DBMS_OUTPUT.PUT_LINE('Błąd: ' || SQLERRM);  
  
END;  
  
/
```

```
BEGIN  
  
    zmien_job_title('TKI_JOB', 'Everythinger');  
  
END;  
  
/
```

```
CREATE OR REPLACE PROCEDURE usun_job (  
  
    p_job_id jobs.job_id%TYPE  
) AS
```

```
BEGIN

    DELETE FROM JOBS

    WHERE job_id = p_job_id;

    IF SQL%ROWCOUNT = 0 THEN

        RAISE_APPLICATION_ERROR(-20002, 'Nie usunięto żadnego joba – brak dopasowania.');
```

ELSE

```
        DBMS_OUTPUT.PUT_LINE('Usunięto JOB: ' || p_job_id);

    END IF;

EXCEPTION

    WHEN OTHERS THEN

        DBMS_OUTPUT.PUT_LINE('Błąd: ' || SQLERRM);

END;
```

/

```
BEGIN

    usun_job('TKI_JOB');

END;
```

/

```
SELECT * FROM EMPLOYEES;
```

```
CREATE OR REPLACE PROCEDURE pobierz_pracownika (

    p_emp_id employees.employee_id%TYPE,

    p_nazwisko OUT employees.last_name%TYPE,

    p_zarobki OUT employees.salary%TYPE

) AS

BEGIN
```

```
SELECT last_name, salary INTO p_nazwisko, p_zarobki FROM EMPLOYEES

WHERE employee_id = p_emp_id;

EXCEPTION

WHEN NO_DATA_FOUND THEN

    DBMS_OUTPUT.PUT_LINE('Nie znaleziono pracownika o ID: ' || p_emp_id);

WHEN OTHERS THEN

    DBMS_OUTPUT.PUT_LINE('Błąd: ' || SQLERRM);

END;

/

DECLARE

    v_nazwisko employees.last_name%TYPE;

    v_zarobki employees.salary%TYPE;

BEGIN

    pobierz_pracownika(100, v_nazwisko, v_zarobki);

    DBMS_OUTPUT.PUT_LINE('Nazwisko: ' || v_nazwisko || ', Zarobki: ' || v_zarobki);

END;

/
```

```
CREATE OR REPLACE PROCEDURE dodaj_pracownika (

    p_first_name employees.first_name%TYPE DEFAULT 'Nowy',

    p_last_name employees.last_name%TYPE DEFAULT 'Pracownik',

    p_salary employees.salary%TYPE DEFAULT 1000,

    p_job_id employees.job_id%TYPE DEFAULT 'IT_PROG',

    p_email employees.email%TYPE DEFAULT 'nowy@firma.com',

    p_hire_date employees.hire_date%TYPE DEFAULT SYSDATE,

    p_department_id employees.department_id%TYPE DEFAULT 50
```



```
) AS

BEGIN

    IF p_salary > 20000 THEN

        RAISE_APPLICATION_ERROR(-20003, 'Nie można dodać pracownika z wynagrodzeniem powyżej 20000.');
```

END IF;

```
INSERT INTO EMPLOYEES (

    employee_id, first_name, last_name, salary,

    job_id, email, hire_date, department_id

) VALUES (

    EMPLOYEES_SEQ.NEXTVAL, p_first_name, p_last_name, p_salary,

    p_job_id, p_email, p_hire_date, p_department_id

);

DBMS_OUTPUT.PUT_LINE('Dodano pracownika: ' || p_first_name || ' ' || p_last_name);

EXCEPTION

    WHEN OTHERS THEN

        DBMS_OUTPUT.PUT_LINE('Błąd: ' || SQLERRM);

END;

/

BEGIN

    dodaj_pracownika(p_salary => 15000);

END;

/

SELECT * FROM EMPLOYEES;
```