7-3: Trapping User-Defined Exceptions

Vocabulary

1.RAISE_APPLICATION_ERROR

2.RAISE

3.USER DEFINED ERROR

Try It / Solve It

1.

DECLARE_no_rows_updated EXCEPTION;

BEGIN

UPDATE excep_emps

SET salary = 10000

WHERE department_id = 20;

IF SQL%NOTFOUND THEN

RAISE E_NO_ROWS_UPDATED;

END IF;

EXCEPTION

WHEN e_no_rows_updated THEN

DBMS_OUTPUT.PUT_LINE('nu s-a facut update');

WHEN OTHERS THEN

DBMS_OUTPUT.PUT_LINE('eroare:'||SQLCODE||'-'||SQLERRM);

END;

30,40- nu s-a facut update

2.DECLARE

E_no_rows_updated EXCEPTION;

BEGIN

UPDATE excep_emps

```
SET salary = 10000

WHERE department_id = 40;

IF SQL%NOTFOUND THEN

Raise E_NO_ROWS_UPDATED;

END IF;

EXCEPTION

WHEN e_no_rows_updated THEN

RAISE_APPLICATION_ERROR(-20202, 'nu s-a facut update');

WHEN OTHERS THEN

DBMS_OUTPUT.PUT_LINE('eroare:'||SQLCODE || '-' || SQLERRM);

END;

3.DECLARE

E_no_rows_updated EXCEPTION;

BEGIN

UPDATE excep_emps

SET salary = 10000

WHERE department_id = 40;

IF SQL%NOTFOUND THEN

RAISE_APPLICATION_ERROR(-20202,' nu s-a facut update ');

END IF;

END;

4.A.

There are 0 employees

0 employees were deleted

B.DECLARE

v_dept_id excep_emps.department_id%TYPE;

v_count NUMBER;

e_no_emps_in_dept EXCEPTION;
```

```
e_no_rows_deleted EXCEPTION;

BEGIN

v_dept_id := 40;

SELECT COUNT(*) INTO v_count

FROM excep_emps

WHERE department_id = v_dept_id;

IF v_count = 0 THEN

RAISE e_no_emps_in_dept;

END IF;

DBMS_OUTPUT.PUT_LINE('There are ' || v_count || ' employees');

DELETE FROM excep_emps

WHERE department_id = v_dept_id;

IF SQL%NOTFOUND THEN -- or IF SQL%ROWCOUNT = 0 THEN

RAISE e_no_rows_deleted;

END IF;

DBMS_OUTPUT.PUT_LINE(SQL%ROWCOUNT ||' employees were deleted');

ROLLBACK;

EXCEPTION

WHEN e_no_emps_in_dept THEN

DBMS_OUTPUT.PUT_LINE('nu sunt angajati');

WHEN e_no_rows_deleted THEN

DBMS_OUTPUT.PUT_LINE('nu s-a facut delete');

END;
```

nu sunt angajati

C.DECLARE

```
v_dept_id excep_emps.department_id%TYPE;

v_count NUMBER;

BEGIN
```

```
v_dept_id := 40;

SELECT COUNT(*) INTO v_count

FROM excep_emps

WHERE department_id = v_dept_id;

IF v_count = 0 THEN

RAISE_APPLICATION_ERROR(-20203,'This department has no employees');

END IF;

DBMS_OUTPUT.PUT_LINE('There are ' || v_count || ' employees');

DELETE FROM excep_emps

WHERE department_id = v_dept_id;

IF SQL%NOTFOUND THEN -- sau IF SQL%ROWCOUNT = 0 THEN

RAISE_APPLICATION_ERROR(-20204,'No employees were deleted');

END IF;

DBMS_OUTPUT.PUT_LINE(SQL%ROWCOUNT ||' employees were deleted');

ROLLBACK;

END;
```

This department has no employees