

**Exp11****PL/SQL PROGRAMS**

1 DECLARE

    v\_emp\_id    NUMBER := 110;

    v\_salary    EMPLOYEES.SALARY%TYPE;

    v\_incentive  NUMBER;

BEGIN

    SELECT SALARY INTO v\_salary

    FROM EMPLOYEES

    WHERE EMPLOYEE\_ID = v\_emp\_id;

    v\_incentive := v\_salary \* 0.10;

    DBMS\_OUTPUT.PUT\_LINE('Employee ID: ' || v\_emp\_id);

    DBMS\_OUTPUT.PUT\_LINE('Salary: ' || v\_salary);

    DBMS\_OUTPUT.PUT\_LINE('Incentive (10%): ' || v\_incentive);

EXCEPTION

    WHEN NO\_DATA\_FOUND THEN

        DBMS\_OUTPUT.PUT\_LINE('Employee with ID ' || v\_emp\_id || ' not found.');

END;

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2 DECLARE

    "MyVar" NUMBER := 10; -- quoted identifier (case-sensitive)

    myvar  NUMBER := 20; -- unquoted identifier (case-insensitive)

BEGIN

    DBMS\_OUTPUT.PUT\_LINE("MyVar"); -- valid

    DBMS\_OUTPUT.PUT\_LINE(MyVar);  -- invalid case-insensitive reference to quoted identifier

EXCEPTION

    WHEN OTHERS THEN

        DBMS\_OUTPUT.PUT\_LINE('Error: Invalid case-insensitive reference to quoted identifier.');

END;

/

3 DECLARE

v\_emp\_id NUMBER := 122;

v\_salary EMPLOYEES.SALARY%TYPE;

BEGIN

SELECT SALARY INTO v\_salary

FROM EMPLOYEES

WHERE EMPLOYEE\_ID = v\_emp\_id;

v\_salary := v\_salary \* 1.15; -- increase by 15%

UPDATE EMPLOYEES

SET SALARY = v\_salary

WHERE EMPLOYEE\_ID = v\_emp\_id;

DBMS\_OUTPUT.PUT\_LINE('Salary updated successfully for employee ' || v\_emp\_id);

DBMS\_OUTPUT.PUT\_LINE('New Salary: ' || v\_salary);

COMMIT;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('Employee with ID ' || v\_emp\_id || ' not found.');

END;

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4 CREATE OR REPLACE PROCEDURE check\_nulls IS

v\_value1 NUMBER := NULL;

v\_value2 NUMBER := 10;

BEGIN

IF v\_value1 IS NULL AND v\_value2 IS NOT NULL THEN

DBMS\_OUTPUT.PUT\_LINE('Condition is TRUE because v\_value1 IS NULL and v\_value2 IS NOT NULL.');

ELSE

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        DBMS_OUTPUT.PUT_LINE('Condition is FALSE.');
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END IF;

END;

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-- Execute the procedure

BEGIN

    check\_nulls;

END;

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5 DECLARE

    v\_name EMPLOYEES.LAST\_NAME%TYPE;

BEGIN

    DBMS\_OUTPUT.PUT\_LINE('Employees whose last name starts with "S":');

    FOR rec IN (

        SELECT LAST\_NAME FROM EMPLOYEES

        WHERE LAST\_NAME LIKE 'S%'

    ) LOOP

        DBMS\_OUTPUT.PUT\_LINE(rec.LAST\_NAME);

    END LOOP;

    DBMS\_OUTPUT.PUT\_LINE(CHR(10) || 'Employees whose last name contains "\_" character:');

    FOR rec IN (

        SELECT LAST\_NAME FROM EMPLOYEES

        WHERE LAST\_NAME LIKE '%\\_%' ESCAPE '\'

    ) LOOP

        DBMS\_OUTPUT.PUT\_LINE(rec.LAST\_NAME);

    END LOOP;

END;

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