

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;

/

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;

/

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

```

        DBMS_OUTPUT.PUT_LINE('Condition is FALSE.');
```

END IF;

END;

/

-- Execute the procedure

BEGIN

 check_nulls;

END;

/

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;

/