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| Roll Number | 21SW085 |
| Section # | 3rd or III |
| Lab # | 11th |
| Topic # | Programming in SQL |

**Task:**

1. Write a program in PL/SQL that displays the deptno, and location of all employees in the Sales department
2. Display the sum of salary of all employees in deptno 30
3. Write a PL/SQL Block to display the following CGPA:

for grade 4 display Excellent

for grade 3 display Very good

for grade 2 display Well done

for grade 1 display You passed

Note: Use Case statement.

1. Print Odd Numbers upto 61. After 61, the loop should be ended.

Note: Use While or Simple Loop

1. Print Natural Numbers upto 50 by using FOR Loop or Simple Loop.

**Solutions:**

**1.**

DECLARE

v\_deptno NUMBER;

v\_location VARCHAR2(50);

BEGIN

SELECT deptno, location

INTO v\_deptno, v\_location

FROM departments

WHERE department\_name = 'Sales';

DBMS\_OUTPUT.PUT\_LINE('Department Number: ' || v\_deptno);

DBMS\_OUTPUT.PUT\_LINE('Location: ' || v\_location);

FOR emp IN (SELECT \* FROM employees WHERE department\_id = v\_deptno) LOOP

DBMS\_OUTPUT.PUT\_LINE('Employee: ' || emp.first\_name || ' ' || emp.last\_name || ', Location: ' || v\_location);

END LOOP;

END;

**2.**

DECLARE

v\_deptno NUMBER := 30;

v\_total\_salary NUMBER := 0;

BEGIN

FOR emp IN (SELECT \* FROM employees WHERE department\_id = v\_deptno) LOOP

v\_total\_salary := v\_total\_salary + emp.salary;

END LOOP;

DBMS\_OUTPUT.PUT\_LINE('Total Salary for Department ' || v\_deptno || ': ' || v\_total\_salary);

END;

**3.**

DECLARE

v\_grade NUMBER := 3;

v\_cgpa VARCHAR2(50);

BEGIN

CASE v\_grade

WHEN 4 THEN v\_cgpa := 'Excellent';

WHEN 3 THEN v\_cgpa := 'Very good';

WHEN 2 THEN v\_cgpa := 'Well done';

WHEN 1 THEN v\_cgpa := 'You passed';

ELSE v\_cgpa := 'Invalid grade';

END CASE;

DBMS\_OUTPUT.PUT\_LINE('CGPA: ' || v\_cgpa);

END;

**4.**

DECLARE

v\_num NUMBER := 1;

BEGIN

WHILE v\_num <= 61 LOOP

IF MOD(v\_num, 2) = 1 THEN

DBMS\_OUTPUT.PUT\_LINE(v\_num);

END IF;

v\_num := v\_num + 1;

END LOOP;

END;

**5.**

BEGIN

FOR i IN 1..50 LOOP

DBMS\_OUTPUT.PUT\_LINE(i);

END LOOP;

END;