DBMS Assignment 4Devam Desai IIT2022035

```
Q1
DECLARE
  v_employee_id employee.employee_id%TYPE;
             employee.salary%TYPE;
  v_salary
BEGIN
  FOR employee_rec IN (SELECT employee_id, salary FROM employee WHERE
salary > 80000 AND department_id IN ('CS', 'ECE')) LOOP
    v_employee_id := employee_rec.employee_id;
    DBMS_OUTPUT.PUT_LINE('Employee ID: ' | | v_employee_id);
  END LOOP;
END;
      loyee_rec IN (SELECT employee_id, salary FROM employee WHERE salary > 80000) LOOP
Q2.
SET SERVEROUTPUT ON;
```

DECLARED

```
v_employee_id employee.employee_id%TYPE;
   v first name employee.first name%TYPE;
   v_hire_year
                        NUMBER;
BEGIN
   FOR employee_rec IN (SELECT employee_id, first_name, EXTRACT(YEAR
FROM hire date) AS hire year
                    FROM employee
                    WHERE dept id = 'CS' AND EXTRACT(YEAR FROM hire date) =
2021) LOOP
      v_employee_id := employee_rec.employee_id;
      v_first_name := employee_rec.first_name;
      v_hire_year := employee_rec.hire_year;
      DBMS OUTPUT.PUT LINE('Employee ID: ' | | v employee id | | ', First
Name: ' | | v_first_name | | ', Hire Year: ' | | v_hire_year);
   END LOOP;
END;
   v_employee_id employee.employee_id%TYPE;
v_first_name employee.first_name%TYPE;
v_hire_year NUMBER;
    FOR employee_rec IN (SELECT employee_id, first_name, EXTRACT(YEAR FROM hire_date) AS hire_year
                  WHERE dept_id = 'CS' AND EXTRACT(YEAR FROM hire_date) = 2021) LOOP
      v_employee_id := employee_rec.employee_id;
      v_first_name := employee_rec.first_name;
v_hire_year := employee_rec.hire_year;
      DBMS_OUTPUT.PUT_LINE('Employee ID: ' || v_employee_id || ', First Name: ' || v_first_name || ', Hire Year: ' || v_hire_year);
Statement processed.
Employee ID: 2, First Name: Mary, Hire Year: 2021
Employee ID: 6, First Name: Susan, Hire Year: 2021
Employee ID: 10, First Name: Linda, Hire Year: 2021
Q3.
SET SERVEROUTPUT ON;
DECLARE
```

```
CURSOR c_employee IS
    SELECT job_id
    FROM employee;
 v_job_title employee.job_id%TYPE;
BEGIN
 -- Print heading
  DBMS_OUTPUT.PUT_LINE('Job Title');
  -- Open the cursor
 OPEN c_employee;
 -- Loop through employees and print job titles
  LOOP
    FETCH c_employee INTO v_job_title;
    EXIT WHEN c_employee%NOTFOUND;
    -- Print job title
    DBMS_OUTPUT.PUT_LINE(v_job_title);
 END LOOP;
  -- Close the cursor
 CLOSE c_employee;
END;
```

```
1 SET SERVEROUTPUT ON;
2 CHILDREN C employee IS
3 CURSOR C employee IS
4 SELECT job id
5 FROM employee;
6 V_job_title employee.job_id%TYPE;
7 REGIII
8 -- Print heading
9 DBMS_OUTPUT.FUT_LINE('Job Title');
10
11 -- Open the cursor
12 OPEN C_employee;
13
14 -- Loop through employees and print job titles
15 LOOP

Statement processed.
3001
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```

```
DECLARE
```

```
CURSOR c_employee IS
```

SELECT employee_id, first_name || ' ' || last_name AS full_name, job_id, hire_date, salary

FROM employee;

```
v_employee_id employee.employee_id%TYPE;
v_full_name employee.first_name%TYPE;
v_job_id employee.job_id%TYPE;
v_hire_date employee.hire_date%TYPE;
```

employee.salary%TYPE;

BEGIN

v salary

-- Print column headings

DBMS_OUTPUT_LINE('Employee ID | Full Name | Job Title | Hire Date | Salary');

```
DBMS_OUTPUT_LINE('-----');
```

-- Open the cursor

```
OPEN c_employee;
  -- Loop through employees and print details
  LOOP
    FETCH c_employee INTO v_employee_id, v_full_name, v_job_id,
v_hire_date, v_salary;
    EXIT WHEN c employee%NOTFOUND;
    -- Print employee details
    DBMS_OUTPUT.PUT_LINE(v_employee_id || ' | ' || v_full_name || ' | ' ||
v_job_id || ' | ' || TO_CHAR(v_hire_date, 'YYYY-MM-DD') || ' | ' || v_salary);
  END LOOP;
  -- Close the cursor
  CLOSE c_employee;
END;
```

```
1 SET SERVERCUPPUT ON;
2 DECLARE
3 CURSOR c_employee id
4 SELECT employee_id, first_name || ' || last_name AS full_name, job_id, hire_date, salary
5 FROM employee;
6 v_employee_id employee.employee_idXTYPE;
7 v_full_name employee.first_nameXTYPE;
8 v_job_id employee.pid_idXTYPE;
9 v_hire_date employee.ahire_dateXTYPE;
10 v_salary employee.salaryXTYPE;
11 v_BEGIN
12 -- Print_column headings
13 DBMS_OUTPUT.PUT_LINE('temployee ID | Full Name | Job Title | Hire Date | Salary');
14 DBMS_OUTPUT.PUT_LINE('------');
15 Statement processed.
Employee ID | Full Name | Job Title | Hire Date | Salary
1 John smith | JoBst | 2022-01-01 | 85000
2 | Mary_Johnson | JoBst | 2022-01-01 | 85000
3 | Michael Williams | Job Title | Hire Date | Salary
1 John smith | JoBst | 2022-02-05 | 75080
4 | Lisa_Jones | JoBst | 2022-01-20 | 85000
5 | David Brown | JoBst | 2021-01-13 | 87000
6 | Susan Dours | JoBst | 2021-01-13 | 87000
6 | Susan Dours | JoBst | 2021-01-13 | 87000
7 | Robert Miller | JOBST | 2021-11-21 | 81000
8 | Patricia Willson | JoBst | 2021-11-25 | 94000
9 | James Moore | JOBST | 2021-11-25 | 94000
10 | Linda Taylor | JOBST | 2021-11-20 | 86000
```

```
DECLARE
  v_employee_count INTEGER := 0;
BEGIN
  -- Count the number of employees with a salary above 80000
 SELECT COUNT(*) INTO v_employee_count
  FROM employee
  WHERE salary > 80000;
  -- If the count is greater than 5, print the employee IDs
  IF v employee count > 5 THEN
    DBMS OUTPUT.PUT LINE('Employee IDs with salary above 80000:');
    FOR employee rec IN (SELECT employee id FROM employee WHERE
salary > 80000) LOOP
      DBMS OUTPUT.PUT LINE(employee rec.employee id);
    END LOOP;
  ELSE
    DBMS_OUTPUT_LINE('There are less than or equal to 5 employees
with salary above 80000.');
  END IF;
END;
```

Q6

DECLARE

v_employee_id employee.employee_id%TYPE := 123; -- Specify the employee ID here

v_count INTEGER;

BEGIN

-- Check if a record exists for the given employee ID

SELECT COUNT(*) INTO v count

FROM employee

WHERE employee id = v employee id;

-- If no record exists, insert a new record

IF v_count = 0 THEN

INSERT INTO employee (employee_id) -- Assuming employee_id is the only column required

VALUES (v_employee_id);

COMMIT; -- Commit the transaction

```
DBMS_OUTPUT.PUT_LINE('Record inserted for Employee ID' ||
v_employee_id);
   ELSE
       DBMS_OUTPUT.PUT_LINE('Record already exists for Employee ID' | |
v_employee_id);
   END IF;
EXCEPTION
   WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE('Error occurred: ' | | SQLERRM);
END;
        V_COUNTE = 0 THEN
INSERT INTO employee (employee_id) -- Assuming employee_id is the only column required
VALUES (V_employee_id);
COMMIT; -- Commit the transaction
DBMS_OUTPUT.PUT_LINE('Record inserted for Employee ID ' || V_employee_id);
 tatement processed.
ecord already exists for Employee ID 123
```

EMAIL PHONE_NUMBER HIRE_DATE JOB_ID SALARY COMMISSION_PCT MANAGER_ID DEPT_ID

EMPLOYEE ID FIRST NAME LAST NAME