Demo Day 11 😊

```
SET SERVEROUTPUT ON;
 ----- Records -----
-- Store multi value inside one variable
-- Record, Collection
DECLARE
  emp EMPLOYEE%ROWTYPE; -- Multi-values -- record -- employee
       --emp_id NUMBER:=&employee_id; -- input from the user --100
BEGIN
  SELECT *
  INTO emp
  FROM employee
  WHERE FULL_NAME = 'Dana Kanaan'; -- id = 100;
  /*
  emp {
   full_name: 'Aseel Al-Serhan',
   email: 'muadi@gmail.com'
  }
  */
  /*
  emp.full_name := 'Raghad';
  emp.email := 'raghad@gmail.com';
  emp.salary := 2000;
  */
  dbms_output.Put_line ('Employee Name: '
             || emp.full_name);
```

```
dbms_output.Put_line ('Employee Email: '
             || emp.email);
EXCEPTION
 WHEN no_data_found THEN
  dbms_output.Put_line ('There is no employee with the ID ');
END;
---- A cursor is a pointer to this context area. ----
----- 1. Implicit Cursor -----
-- The uses of implicit cursor without using any attribute.
DECLARE
 emp_full_name VARCHAR2(35);
       emp_id NUMBER:=&employee_id;
BEGIN
 SELECT full_name
 INTO emp_full_name
 FROM employee
 WHERE id = emp_id;
 dbms_output.Put_line ('Employee Name: '
             || emp_full_name);
EXCEPTION
 WHEN no_data_found THEN
  dbms_output.Put_line ('There is no employee with the ID '| |to_char(emp_id));
END;
-- The uses of SQL%FOUND and SQL%ROWCOUNT attribute
-- to determine if a UPDATE statement affected any rows.
```

```
BEGIN
  UPDATE EMPLOYEE
  SET SALARY = 1200
  WHERE FULL_NAME = 'Basheer';
  IF(SQL%FOUND) THEN
     dbms_output.Put_line ('This query affected' | | SQL%ROWCOUNT | | ' Rows');
  END IF;
  IF(SQL%NOTFOUND) THEN
       dbms_output.Put_line ('No matching rows');
  END IF;
END;
----- 2. Explicit Cursor ------
/*
    1- Declare the cursor.
    2- Open the cursor.
 LOOP
    3- Fetch the cursor for retrieving the data.
  END LOOP;
    4- Close the cursor.
*/
DECLARE
  emp_name EMPLOYEE.FULL_NAME%TYPE;
  emp_dept EMPLOYEE.DEPT_ID%TYPE;
```

```
emp_salary EMPLOYEE.SALARY%TYPE;
  -- 1- Declare the cursor.
  CURSOR c_emp IS SELECT FULL_NAME, DEPT_ID ,SALARY FROM EMPLOYEE;
BEGIN
  -- 2- Open the cursor.
  IF NOT c_emp%ISOPEN THEN
   OPEN c_emp;
  END IF;
  -- 3- Fetch the cursor for retrieving the data.
 LOOP
    FETCH c_emp INTO emp_name, emp_dept, emp_salary;
    EXIT WHEN c_emp%NOTFOUND;
    dbms_output.Put_line ('Employee Name ' | emp_name | |
   'Employee Dept. '|| emp_dept || 'Employee Salary '||emp_salary);
  END LOOP;
  dbms_output.Put_line (c_emp%ROWCOUNT);
  -- 4- Close the cursor.
  CLOSE c_emp;
END;
CREATE OR REPLACE PROCEDURE MAX_NUM(num1 IN NUMBER, num2 IN NUMBER)
IS
BEGIN
  -- PROCEDURE BODY
  IF num1 > num2 THEN
    DBMS_OUTPUT.PUT_LINE(num1);
  ELSIF num1 = num2 THEN
    DBMS_OUTPUT.PUT_LINE('num1 equal num2');
  ELSE
```

```
DBMS_OUTPUT.PUT_LINE(num2);
END IF;
END;

DROP PROCEDURE MAX_NUM;

EXEC MAX_NUM(1,5);
```