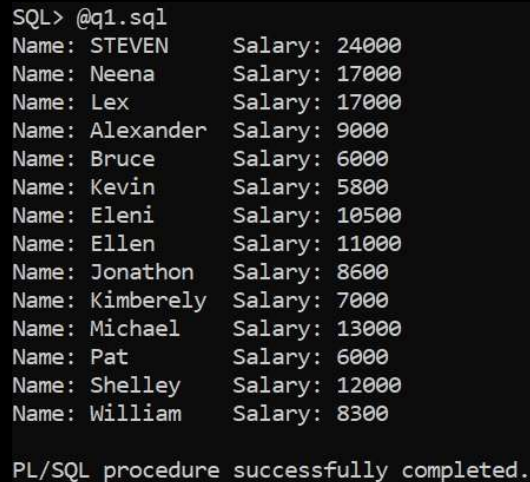# Lab Assignment-10

ROLL: 2005535 | NAME: SAHIL SINGH | DATE: 21/04/22

QUES 1: Write a PL/SQL block to create a explicit cursor using For Loop and display the employees who have salary greater than 4800.

SOLUTION:

```
DECLARE
    var_record employees%ROWTYPE;
    CURSOR cur IS SELECT * FROM employees WHERE salary > 4800;
BEGIN
    OPEN cur;
    LOOP
        FETCH cur INTO var_record;
        EXIT WHEN cur%NOTFOUND;
        DBMS_OUTPUT.PUT_LINE('Name: ' || var_record.first_name || chr(9)||' Salary: '||
var_record.salary);
    END LOOP;
    CLOSE cur;
END;
/
```

OUTPUT:

```
SQL> @q1.sql
Name: STEVEN      Salary: 24000
Name: Neena       Salary: 17000
Name: Lex         Salary: 17000
Name: Alexander   Salary: 9000
Name: Bruce       Salary: 6000
Name: Kevin       Salary: 5800
Name: Eleni       Salary: 10500
Name: Ellen       Salary: 11000
Name: Jonathon    Salary: 8600
Name: Kimberely   Salary: 7000
Name: Michael     Salary: 13000
Name: Pat         Salary: 6000
Name: Shelley     Salary: 12000
Name: William     Salary: 8300

PL/SQL procedure successfully completed.
```

QUES 2: Write a PL/SQL block to create a cursor based records and display the total number of rows present in the table.

SOLUTION:

```
DECLARE
CURSOR cur IS SELECT employee_id,first_name,last_name,salary FROM employees;
    var_record cur%ROWTYPE;
BEGIN
OPEN cur;
    LOOP
      FETCH cur INTO var_record;
      EXIT WHEN cur%NOTFOUND;
```

```
    DBMS_OUTPUT.PUT_LINE('Employees   Details   :   '||'   '||var_record.employee_id   ||'
'||var_record.first_name||' '||var_record.last_name);
    END LOOP;
    DBMS_OUTPUT.PUT_LINE('Total number of rows : '||cur%ROWCOUNT);
CLOSE cur;
END;
/
```

OUTPUT:

```
SQL> @q2.sql
Employees Details :  100 STEVEN King
Employees Details :  101 Neena Kochhar
Employees Details :  102 Lex De Haan
Employees Details :  103 Alexander Hunold
Employees Details :  104 Bruce Ernst
Employees Details :  107 Diana Lorentz
Employees Details :  124 Kevin Mourgos
Employees Details :  141 Trenna Rajs
Employees Details :  142 Curtis Davies
Employees Details :  143 Randall Matos
Employees Details :  144 Peter Vargas
Employees Details :  149 Eleni Zlotkey
Employees Details :  174 Ellen Abel
Employees Details :  176 Jonathon Taylor
Employees Details :  178 Kimberely Grant
Employees Details :  200 Jennifer Whalen
Employees Details :  201 Michael Hartstein
Employees Details :  202 Pat Fay
Employees Details :  205 Shelley Higgins
Employees Details :  206 William Gietz
Total number of rows : 20

PL/SQL procedure successfully completed.
```

QUES 3: Write a PL/SQL block to create a cursor in nested loops and display the records department wise.

SOLUTION:

```
DECLARE
CURSOR  cur  IS  SELECT  *  FROM  departments  WHERE  manager_id  IS  NOT  NULL  ORDER  BY
department_name;
  var_record cur%ROWTYPE;

--Declaration of departments cursor and record variable.

  CURSOR  cur2 (cur_no departments.department_id%TYPE) IS SELECT * FROM employees WHERE
department_id = cur_no;
  var_record2 cur2%ROWTYPE;

--Declaration of employees cursor and record variable.

BEGIN
    OPEN cur;
    LOOP
      FETCH cur INTO var_record;
        EXIT WHEN cur%NOTFOUND;
        DBMS_OUTPUT.PUT_LINE('--------------------------------');
        DBMS_OUTPUT.PUT_LINE('Department Name : '||var_record.department_name);
```

```
        DBMS_OUTPUT.PUT_LINE('----------------------------------');
          OPEN cur2(var_record.department_id);
            LOOP
              FETCH cur2 INTO var_record2;
                EXIT WHEN cur2%NOTFOUND;
                  DBMS_OUTPUT.PUT_LINE('Employees  Details  :  '||var_record2.employee_id||'
'||var_record2.first_name||' '||var_record2.last_name||' '||var_record2.salary);
            END LOOP;
          CLOSE cur2;
    END LOOP;
    CLOSE cur;
END;
/
```

OUTPUT:

```
SQL> @q3.sql
-----------------------------------
Department Name : Accounting
-----------------------------------
Employees Details : 205 Shelley Higgins 12000
Employees Details : 206 William Gietz 8300
-----------------------------------
Department Name : Admisistrarion
-----------------------------------
Employees Details : 200 Jennifer Whalen 4400
-----------------------------------
Department Name : Executive
-----------------------------------
Employees Details : 100 STEVEN King 24000
Employees Details : 101 Neena Kochhar 17000
Employees Details : 102 Lex De Haan 17000
-----------------------------------
Department Name : IT
-----------------------------------
Employees Details : 103 Alexander Hunold 9000
Employees Details : 104 Bruce Ernst 6000
Employees Details : 107 Diana Lorentz 4200
-----------------------------------
Department Name : Marketing
-----------------------------------
Employees Details : 201 Michael Hartstein 13000
Employees Details : 202 Pat Fay 6000
-----------------------------------
Department Name : Sales
-----------------------------------
Employees Details : 149 Eleni Zlotkey 10500
Employees Details : 174 Ellen Abel 11000
Employees Details : 176 Jonathon Taylor 8600
-----------------------------------
Department Name : Shipping
-----------------------------------
Employees Details : 124 Kevin Mourgos 5800
Employees Details : 141 Trenna Rajs 3500
Employees Details : 142 Curtis Davies 3100
Employees Details : 143 Randall Matos 2600
Employees Details : 144 Peter Vargas 124

PL/SQL procedure successfully completed.
```

QUES 4: Declare a cursor c1 to retrieve the last name, salary, hire date, and job class for the employee whose employee ID is 120.

SOLUTION:

```
DECLARE
    var_record employees%ROWTYPE;
    cursor c1 IS SELECT * FROM employees WHERE employee_id = 124;
BEGIN
    OPEN c1;
    LOOP
        FETCH c1 INTO var_record;
        EXIT WHEN c1%NOTFOUND;
        DBMS_OUTPUT.PUT_LINE('Last Name: ' || var_record.last_name || chr(9) || ' Salary:
' || var_record.salary || ' Hire Date: ' || var_record.hire_date || ' Job Class: ' ||
var_record.job_id);
    END LOOP;
    CLOSE c1;
END;
/
```

OUTPUT:

```
SQL> ed q4.sql

SQL> @q4.sql
Last Name: Mourgos        Salary: 5800 Hire Date: 16-NOV-99 Job Class: ST_MAN

PL/SQL procedure successfully completed.
```