Oracle

**Coding Challenge**

**Created by: Kurien Daniel**

**Created Date: 15/04/2024**

Based on the information you provided, please follow the steps to create the necessary data structures, populate them, create executable database objects, and write reports to show all employees for a department and the total employee salary for a Department in Oracle 19c:

Download Widget folder from Git repository from the following link **https://github.com/kuriendanielthomas/Widget**

**1.Create & Populate the Data Structures**

Run following command in editor of database tool either Toad or SQL Developer.

@C:\widget\Build\DB\_OBJECTS\TABLE\CREATE\_TABLES.SQL

**2. Create a PL/SQL Procedure to Create an Employee**

Run following command in editor of database tool either Toad or SQL Developer.

@C:\widget\Build\DB\_OBJECTS\PROCEDURE\CREATE\_EMPLOYEE.SQL;

Execution Code

Parameters- Employee ID, Variable to store error message

Declare

ErrorMessage varchar2(120);

v\_salary1 number;

begin

v\_salary1 :=ReturnSalary(90001,ErrorMessage) ;

dbms\_output.put\_line(v\_salary1);

end;

**3. Create a PL/SQL Procedure to Increase or Decrease Employee Salary**

Run following command in editor of database tool either Toad or SQL Developer.

@C:\widget\Build\DB\_OBJECTS\PROCEDURE\UPD\_SALARY.SQL;

Execution Code

Parameters= Employee Id,Percent of change, D for Decrease & I for Increment

Variable to store error message

Declare

vsalary number;

error\_message varchar2(120);

begin

UPD\_SALARY(90001,10,'D',error\_message);

select salary into v\_salary from w\_employee where employee\_id=90001;

dbms\_output.put\_line(vsalary );

end;

Follow file C:\widget\Build\Test Update Salary.txt to test and execute.

**4. Create a PL/SQL Procedure to Transfer an Employee**

Run following command in editor of database tool either Toad or SQL Developer.

@C:\widget\Build\DB\_OBJECTS\PROCEDURE\TRNEMPLOYEEDEPARTMENT.SQL;

Execution Code

--Parameters= Employee Id,Department ID, Error Message

Declare

ErrorMessage varchar2(120);

v\_salary1 number;

begin

TrnEmployeeDepartment(90004,3,ErrorMessage) ;

end;

**5. Create a PL/SQL Function to Return Employee Salary**

Run following command in editor of database tool either Toad or SQL developer.

@C:\widget\Build\DB\_OBJECTS\FUNCTION\RETURNSALARY.SQL;

Execution Code

--Parameters= Employee Id, Error Message

Declare

ErrorMessage varchar2(120);

v\_salary1 number;

begin

v\_salary1 :=ReturnSalary(90052,ErrorMessage) ;

end;

**6. Report: Show All Employees for a Department**

SQL

Below query can be used to create report from Oracle Reports or Oracle Bi

SELECT Employee\_id,Employee\_Name, Job\_Title

FROM w\_Employee

WHERE department\_id = &department\_id

order by Employee\_id

**7. Report: Total Employee Salary for a Department**

SQL

Below query can be used to create report from Oracle Reports or Oracle Bi

SELECT D.Department\_id,Department\_Name, SUM(Salary) AS Total\_Salary

FROM W\_Department d

JOIN W\_Employee e ON d.Department\_id = e.Department\_id

GROUP BY D.Department\_id,D.Department\_Name

Order By D.Department\_id