311-Lab06W8 stored procedures 2

Lab 6 – Week 8 (Stored Procedures/Iterative Statements)

**Submission**

***Your submission will be a single text-based SQL file with appropriate header and commenting. Please ensure your file runs when the entire file is executed in SQL Developer.***

Create a new Worksheet in SQL Developer. Save the file as L06\_ID#\_LASTNAME.txt

IMPORTANT: use the file name as the email subject line -- L06\_ID#\_LASTNAME

Your submission needs to be commented and include the question and the solutions.

In this Lab, you create PL/SQL stored procedures to perform the following tasks. As you know, a stored procedure does not return any value. To send values back to the caller, you can use OUT parameters.

A parameter can be

* IN parameter
* OUT parameter
* IN OUT parameter

See the following template:

|  |
| --- |
| **CREATE** **OR REPLACE** *procedure\_name*(**arg1** **IN**/**OUT/IN OUT** data\_type, ...) AS  **BEGIN**  ....  **EXCEPTION**  **WHEN OTHERS**  **THEN**  DBMS\_OUTPUT.PUT\_LINE ('Error!');  **END** procedure\_name; |

For all the stored procedures make sure you handle all exceptions such as

* TOO\_MANY\_ROWS
* NO\_DATA\_FOUND
* OTHERS
* . . .

Besides checking all required exceptions, have the OTHER exception checked just in case any error occurs that has not been anticipated at the time you write the code.

Tasks

1 The company wants to calculate the employees’ annual salary:

The first year of employment, the amount of salary is the base salary which is $10,000.

Every year after that, the salary increases by 5%.

Write a stored procedure named ***calculate\_salary*** which gets an employee ID and for that employee, calculates the salary based on the number of years the employee has been working in the company. (Use a loop construct to calculate the salary).

The procedure calculates and prints the salary.

Sample output:

First Name: first\_name

Last Name: last\_name

Salary: $9999,99

If the employee does not exist, the procedure displays a proper message.

2 Write a stored procedure named **employee\_works\_here** to print the employee\_id, employee Last name and department name.

This is sample output

Employee # Last Name Department Name

9999 Able Manufacturing

9998 Notsoable Shipping

If the value of the department name is null or does not exist, display “no department”.

The value of employee ID ranges from your Oracle id's last 2 digits (ex: dbs311\_203g37 would use 37)

to employee 105

You can use a loop to find and display the information of each employee inside the loop.

(Use a loop construct to answer this question. Do not use cursors.)

Go to next page to see sample submission

Example Submission

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
-- Name: Your Name  
-- ID: #########  
-- Date: The current date  
-- Purpose: Lab 6 DBS311  
-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
  
-- Question 1 – write a brief note about what the question is asking  
-- Q1 SOLUTION –

CREATE OR REPLACE procedure\_name(arg1 data\_type, ...) AS

BEGIN

....

EXCEPTION

WHEN OTHERS

THEN

DBMS\_OUTPUT.PUT\_LINE (Error!');

END procedure\_name;  
  
-- Question 2 –

-- Q2 Solution –