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Assignment A7

Problem Statement:
Write a Stored Procedure namely proc_Grade for the categorization of customer. If purchase by customer in year is <=20000 and >=10000 then customer will be placed in platinum category. If purchase by customer is between 9999 and 5000 category is gold, if purchase between 4999 and 2000 category is silver.

Customer (Cust_id, name, total_purchase)
Category (Cust_id, Name, Class)

Write a PL/SQL block using stored procedure created with the above requirements.

Learning Objective:
1. To understand & implement the stored function and stored procedures in PL/SQL.
2. To pass in, out parameters for function and procedure.

Learning Outcomes: The student will be able to implement:
1. Implement stored function.
2. Implement stored procedure

Hardware and software requirements:
PL/SQL, Linux based OS

Theory:
Stored Procedures
A stored procedure or in simple a proc is a named PL/SQL block which performs one or more specific task. This is similar to a procedure in other programming languages. A procedure has a header and a body. The header consists of the name of the procedure and the parameters or variables passed to the procedure. The body consists or declaration section, execution section and exception section similar to a general PL/SQL

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Block. A procedure is similar to an anonymous PL/SQL Block but it is named for repeated usage.

Passing parameters

We can pass parameters in 3 ways:

1. IN-parameters
2. OUT-parameters
3. IN OUT-parameters

A procedure may or may not return any value

Syntax:

Create [or Replace] Procedure proc_name [list of parameters]
IS
declaration section
BEGIN
execution section
EXCEPTION
exception section
END;

IS marks the beginning of the body of a procedure.

It can be simply executed using Execute [or Exec] proc_name and called directly in another procedure

Stored Function

A function is a named PL/SQL Block which is similar to a procedure. The major difference between a procedure and a function is, a function must always return a value, but a procedure may or may not return a value.

Syntax:

Create [or Replace] Function fn_name

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[parameters]
Return return_type
Is
...(Same as procedure)
Return return_variable;
End;

Return type: The header section defines the return type of the function. The return datatype can be any of the oracle datatype like varchar, number etc. The execution and exception section both should return a value which is of the datatype defined in the header section.

Conclusion: Thus, we learnt about stored procedures and stored functions in SQL and implemented a procedure that calls a function to return category of a customer.