PL/SQL part 3 of 3 Notes adapted from Nebojsa October 2020

To do this a different script will need to be loaded as the customer table is different than the one used in 2020 Fall.

However, you can still see how this works.

How to build a Block and then how to transform it to a Stored Procedure with two IN parameters, ***Part III***

Problem: We are going to reduce Credit\_Limit for all Customers, if they are on the Cancelled Order List, for a given PCT value, but we will also exclude a given Customer from that change.

We will print a Number of customers that have been updated.

Then we will UNDO our change with ROLLBACK command incorporated in the script.

1) Our first Code Example is a Block. It will need Three Variables:

Customer\_id, Pct value and a Number of customers updated..

Firstly, we will find out who are those Customers and what is their Credit Limit

SQL > SELECT customer\_id, credit\_limit FROM customers

WHERE customer\_id In

(SELECT DISTINCT customer\_id FROM orders

WHERE status = 'Canceled')

ORDER BY 1;

CUSTOMER\_ID CREDIT\_LIMIT

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5 100

6 100

7 100

**8 100**

22 200

43 500

44 500

45 500

46 500

47 600

53 700

56 700

59 700

60 700

67 1200

**15 rows selected.**

**DECLARE**

**v\_cust# Customers.customer\_id%TYPE := 8;**

**v\_pct INTEGER := 10;**

**v\_number INTEGER;**

**BEGIN**

**UPDATE customers SET credit\_limit = credit\_limit\*(1-v\_pct/100)**

**WHERE customer\_id IN (SELECT DISTINCT customer\_id**

**FROM orders**

**WHERE status = 'Canceled')**

**AND customer\_id <> v\_cust#;**

**v\_number := SQL%ROWCOUNT; -- count number of rows**

**DBMS\_OUTPUT.PUT\_LINE('# of Customers with a decreased credit limit of ' || v\_pct ||'% is ' || v\_number);**

**END;**

/

**ROLLBACK;**

-- provided values are 8 (for Customer\_id) and 10 (for % decrease)

**# of Customers with a decreased credit limit of 10% is 14**

PL/SQL procedure successfully completed.

**Rollback complete.**

**2)** Our second Code Example is a Stored Procedure. It will need TWO IN parameters : for Customer\_id and for Pct value and one Variable for Number of customers updated.

**CREATE OR REPLACE PROCEDURE upd\_cust\_limit (**

**p\_cust# IN Customers.customer\_id%TYPE,**

**p\_pct INTEGER)**

**IS**

**v\_number INTEGER;**

**BEGIN**

**UPDATE customers**

**SET credit\_limit = credit\_limit\*(1-p\_pct/100)**

**WHERE customer\_id IN (SELECT DISTINCT customer\_id**

**FROM orders**

**WHERE status = 'Canceled')**

**AND customer\_id <> p\_cust#;**

**v\_number := SQL%ROWCOUNT;**

**DBMS\_OUTPUT.PUT\_LINE('# of Customers with a decreased credit limit of ' || p\_pct ||'% is ' || v\_number);**

**END;**

**/**

**ROLLBACK;**

SQL> **EXECUTE upd\_cust\_limit(8,10);**

**# of Customers with a decreased credit limit of 10% is 14**

PL/SQL procedure successfully completed.

SQL> **EXECUTE upd\_cust\_limit(2,10);**

**# of Customers with a decreased credit limit of 10% is 15**

PL/SQL procedure successfully completed.