

Procedures, Functions, and loops in PL/SQL

Case Study: Online food ordering System

Objective: The objective of this task is to design, implement, and execute PL/SQL Procedures, functions and loops to handle real-world business scenarios related to an online food ordering system.

Step 1

Execution:- BEGIN

update_Payment_status (i, 'Paid');
END;

Expected output:-

Payment status updated successfully for order ID: 1
Statement Processed.

Step 1: Ensure the Necessary Tables Exist.

DROP TABLE OrderTable PURGE;

DROP TABLE DELIVERY FORGEE;

DROP TABLE Menu_Item FORGEE;

CREATE TABLE OrderTable(

Order ID Number PRIMARY KEY,

Cost_ID# Number,

Order - Date DATE,

Order - Total Number (10,12),

Payment - status VARCHAR(20));

CREATE TABLE Delivery(Order - ID Number PRIMARY KEY,

Item_Name VARCHAR(100), Price Number (10,12));

INSERT INTO OrderTable VALUES ('101', TO_DATE ('2024-02-01',

'YY-MM-DD'), 250.50, 'Pending');
INSERT INTO OrderTable VALUES (2, 102, TO_DATE ('2024-02-02',

'YY-MM-DD'), 400.75, 'Paid');

INSERT INTO Delivery VALUES (1, 'Pending');

INSERT INTO Delivery VALUES (2, 'Delivered');

INSERT INTO Menu_Item VALUES (1, 'Pizza', 500);

INSERT INTO Menu_Item VALUES (2, 'Burger', 300);

Step 1A Create a Procedure.

CREATE OR REPLACE PROCEDURE Update_Payment_Status (

P_Order_ID IN Number, P_New_Status IN VARCHAR2)

AS BEGIN

UPDATE Order_Table SET Payment_Status = P_New-St

status WHERE Order-ID = P_Order-ID;
COMMIT;

DBMS_OUTPUT.PUT_LINE ('Payment Status updated successfully for order ID: ' || P_Order-ID);
END;

Expected output:

Procedure Created.

Step 1: Create a Function

CREATE OR REPLACE FUNCTION Get_Total_Revenue RETURN
NUMBER AS V_Total_Revenue NUMBER;
BEGIN

SELECT Sum(Orderv-Tota) INTO V_Total_Revenue FROM

Orderv Table;

RETURN V_Total_Revenue;

END;

Query-3:

DECLARE

V_Order-ID OrdervTableOrder-ID %TYPE;

CURSOR CUR IS SELECT Order-ID FROM Delivery WHERE

Delivery_Status = 'Pending';

BEGIN

Open CUR;

LOOP

FETCH CUR INTO V_Order-ID;

EXIT WHEN CUR%NOTFOUND;

UPDATE Delivery

SET Delivery_Status = 'Delayed';

Query 2: Function to Calculate Total Revenue.

Expected output:

Function Created.

Steps: Execution.

GET_TOTAL-REVENUE)

801.95

Query 3: Loop : Mark All undelivered orders as "Delayed";

Expected output:

1 records updated.

Query 4: Procedure to Get order Details by Customer ID.

Expected output:

Procedure Created.

Step 2 : Execution

BEGIN

Get_order-Details-By-Customer(1);

END;

Expected output:

Order ID : 1, Date : 2024-02-01, Total : 250.5, Payment : Paid

Statement Processed.

WHERE order-ID = V-order-ID;

DBMS-output line (order||V-order-ID||' marked as Delayed)

END loop;

close cur;

COMMIT;

END;

Query 4:- Create a Procedure.

CREATE OR REPLACE PROCEDURE Get_Customer_Order (P-cost-ID IN NUMBER

) AS

BEGIN

FOR order-rec IN (SELECT order-ID, order-Date, Order-

total, Payment-status FROM order-table WHERE cost-ID =

P-cost-ID) LOOP DBMS-output.put-line

('order-ID: '||order-rec.order-ID||', Date: '||order-rec-

order-ID||', total: '||order-rec.order-total||', status: '

||order-rec.payment-status);

END loop;

END;

Query 5:-

Step 4:- Create a Procedure

CREATE OR REPLACE PROCEDURE Apply-Discout (discount-Percent IN Number)

IS BEGIN

UPDATE Menu-Item

SET Price = Price - (Price * discount-Percent / 100);

Query 5:- Procedure to Apply Discount on Menu Items

Expected output:-

Procedure Created.

Step 2:- Execution.

BEGIN

Apply-Discout (10);

END;

Expected output:-

Discount Applied: 10%.

Statement Processed.

VELTECH	
EX NO.	15
PERFORMANCE (5)	3
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	4
RECORD (4)	15
TOTAL (15)	15
SIGN WITH DATE	15/11/25

Result:- Hence, Implementing Procedures, functions and loops in PL/SQL has been successfully.

15/11/25