

Task-6: Procedures, functions and loops

Aim:

To Procedures, functions and loops

Objective:

To Objective 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. This will help in automating transactions, improving database efficiency and enforcing business rules in a structured manner.

Step 1:

Before running the procedure and functions, create the required tables in your oracle database.

```
DROP TABLE ordertable PURGE;
```

```
DROP TABLE Delivery PURGE;
```

```
DROP TABLE Memo-Item PURGE;
```

CREATE TABLE Delivery(Order-ID Number Primary Key,
Delivery_Status VARCHAR(20), Foreign Key(Order-ID) References
ordertable(Order-ID));

```
CREATE TABLE ordertable(Order-ID Number Primary Key,
```

Task-6: Procedures function and loops

Objective: The objective of this task is to design, implement and execute all SQL Procedures, functions and loops to handle real-world business logic scenarios as related to an online food ordering system. This will help in automating transactions, improving database efficiency and enforcing business rules actual and memory.

Step 1: Ensure the necessary tables exist.
Before running the procedure and functions, create the required table in your oracle database.

DROP TABLE order_table PURGE;

DROP TABLE Delivery PURGE;

DROP TABLE Menu_Item PURGE;

CREATE TABLE order_table order_ID Number
Primary key cost_ID Number, order_Data DATE,
order_total Number(10,2), Payment_Status varchar
(20));

CREATE TABLE Delivery Corder_ID Number Primary
key Delivery_Status varchar(20), foreign key
(Corder_ID) references order_table (order_ID);

INSERT into order_table values (1, 101, '2023-01-01',
'YYYY-MM-DD'), 250.25,

Order ID: 1, Date: 01-FEB-24, Total:
250.5, Status: Paid
Statement processed.

Discount Applied: 10%
Statement processed.

'Pending');

INSERT into Delivery values (1, 'Pending');

INSERT into Delivery values (2, 'Delivered');

INSERT into Delivery values (3, 'Pending');

| - Procedure to update Payment status.

Step 1: Create a procedure

Create OR Replace procedure update_Payment_Status (P_order_ID IN Number, P_new_Status IN Varchar AS Begin update order table set Payment_Status = P_New_Status where order_ID = P_order_ID;

Commit;

DBMS_output Put_line ('Payment status updated for successfully');

order ID: || P_order_ID);

End;

|

Expected output:

Procedure created

Step 2: Execution

Begin

update_Payment_Status (1, 'Paid');

End; ✓

|

Expected output:

Payment status updated successfully for orderID: 1

Statement Processed.

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

GET_TOTAL_REVENUE()

801.25

Query 2: function to calculate total revenue.

Step 1: Create a function.

CREATE OR REPLACE FUNCTION GET_TOTAL_REVENUE

RETURN NUMBER AS V_TOTAL_REVENUE NUMBER;

Begin

 Select sum(ORDER_TOTAL) into V_TOTAL_REVENUE FROM

 ORDER TABLE;

 Return V_TOTAL_REVENUE;

END;

/

Expected output

Function created.

Step 2: Execution

GET_TOTAL_REVENUE()

801.25

Query 3: Loop; mark all underlined orders as

"Delayed".

Declare v_order_ID ORDER TABLE. ORDER_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% NOT FOUND;

 Update Delivery

 SET Delivery_Status = "Delayed";

 Where ORDER_ID = v_order_ID;

order_ID	Delivery_status
1	Delayed
2	Delivered
3	Delayed

```
Deny_output PUT_line ("Order" // v_order // 'marked  
as Delayed');  
END loop;  
close cur;  
Commit;  
END;
```

/

Expected output: 1 row(s) update

Query 4: Procedure to get order Details by the
customer ID.

Step 2: Create a procedure.

```
Create or Replace Procedure Get_Customer_Orders(  
P_wst_ID IN Number) AS
```

Begin

```
    for order_rec IN (Select order_ID, Order Date,  
order total, Payment_Status from order not table  
where cost_ID = P_Cost_ID) loop  
        DBMS_output.PUT_line ('Order ID:' // order_rec.order_ID //'  
        ', Date:' // order_rec.order_Date //'  
        ', Total:' // order_rec.order_Total //'  
        ', Status:' // order_rec.Payment_Status);
```

End loop;

End;

/

Expected Output:

Procedure created.

Item_ID	Item_name	price
1	Pizza	450.00
2	Burger	450.00
3	Pasta	405.00

order_ID	Cust_ID	order_Date	order_total	payment_status
1	101	2024-02-01	250.50	Paid
2	102	2024-02-02	400.75	Paid
3	103	2024-02-03	150.00	Pending

Step 2: Executed

Begin

Get_order_Details_By_Customer(1);

END;

/ Expected output: Order ID : 1, Date: 2024-02-01, Total:

250.5, Payment: Paid statement Processed.

Query 5: Procedure to apply Discount on menu_items

Step-2: Create a procedure.

Create or Replace Procedure Apply_Discount (discount_percent IN number) IS

Begin

update Menu_Item

set Price = Price - (Price * discount_Percent / 100);

Commit;

DBMS_OUTPUT.PUT_LINE('Discount Applied: // discount Percent');

// %);

END;

/

Expected output

Procedure created.

Result: Thus, the PL/SQL procedures, functions and loops on number theory business scenario experiment was successfully completed and results are verified.

VEL TECH - CSE	
EX NO	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS	5
VIVA VOICE (5)	5
RECORD (5)	4
TOTAL (20)	19
SIGN WITH DATE	DX/19/2024