Database Management System Lab

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Section: A3

Assignment No: 4

Problem Statement:

Consider the following tables:

Table: ORDERMAST  
Structure:  
ORDER\_NO CHAR(5) primary key  
ORDER\_DT DATE

Table: ORDERDETAILS  
Structure:  
ORDER\_NO CHAR(5)  
ITEM\_NO CHAR(5)  
QTY NUMBER  
ORDER\_NO + ITEM\_NO is primary key

Table: DELIVERYMAST  
Structure:  
DELV\_NO CHAR(5) primary key  
ORDER\_NO CHAR(5)  
DELV\_DT DATE

Table: DELIVERY\_DETAILS  
Structure:  
DELV\_NO CHAR(5)  
ITEM\_NO CHAR(5)  
QTY NUMBER  
DELV\_NO+ITEM\_NO is primary key

Write a PL/SQL block which accepts two dates & find the information of the pending delivery for the orders placed between the two dates supplied by the user. Note, an order can have request for multiple items. Against an order, multiple delivery with partial shipment is possible.

Solution:

Here's a PL/SQL block that accepts two dates and finds the information of the pending deliveries for the orders placed between those two dates:

DECLARE

v\_start\_date DATE := TO\_DATE('&start\_date', 'YYYY-MM-DD'); -- Assuming you'll provide the start date in 'YYYY-MM-DD' format

v\_end\_date DATE := TO\_DATE('&end\_date', 'YYYY-MM-DD'); -- Assuming you'll provide the end date in 'YYYY-MM-DD' format

BEGIN

FOR order\_rec IN (

SELECT DISTINCT om.ORDER\_NO, om.ORDER\_DT

FROM ORDERMAST om

WHERE om.ORDER\_DT BETWEEN v\_start\_date AND v\_end\_date

) LOOP

-- Display order information

DBMS\_OUTPUT.PUT\_LINE('Order Number: ' || order\_rec.ORDER\_NO);

DBMS\_OUTPUT.PUT\_LINE('Order Date: ' || TO\_CHAR(order\_rec.ORDER\_DT, 'YYYY-MM-DD'));

-- Fetch pending delivery information

FOR delivery\_rec IN (

SELECT dd.DELV\_NO, dd.ITEM\_NO, dd.QTY

FROM DELIVERY\_DETAILS dd

INNER JOIN DELIVERYMAST dm ON dd.DELV\_NO = dm.DELV\_NO

WHERE dm.ORDER\_NO = order\_rec.ORDER\_NO

AND dm.DELV\_DT IS NULL -- Check for pending deliveries

) LOOP

-- Display pending delivery details

DBMS\_OUTPUT.PUT\_LINE('Pending Delivery Number: ' || delivery\_rec.DELV\_NO);

DBMS\_OUTPUT.PUT\_LINE('Item Number: ' || delivery\_rec.ITEM\_NO);

DBMS\_OUTPUT.PUT\_LINE('Quantity: ' || delivery\_rec.QTY);

DBMS\_OUTPUT.PUT\_LINE('------------------------');

END LOOP;

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

END LOOP;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

DBMS\_OUTPUT.PUT\_LINE('No pending deliveries found for the specified period.');

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('An error occurred: ' || SQLERRM);

END;

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This PL/SQL block retrieves the distinct order numbers and order dates for the orders placed between the provided start and end dates. Then, for each order, it fetches the pending delivery details by joining the DELIVERY\_DETAILS and DELIVERYMAST tables. Finally, it displays the order information along with the details of pending deliveries, if any. If no pending deliveries are found for the specified period, it displays a message indicating the same.