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

```sql
    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;
/
```

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.