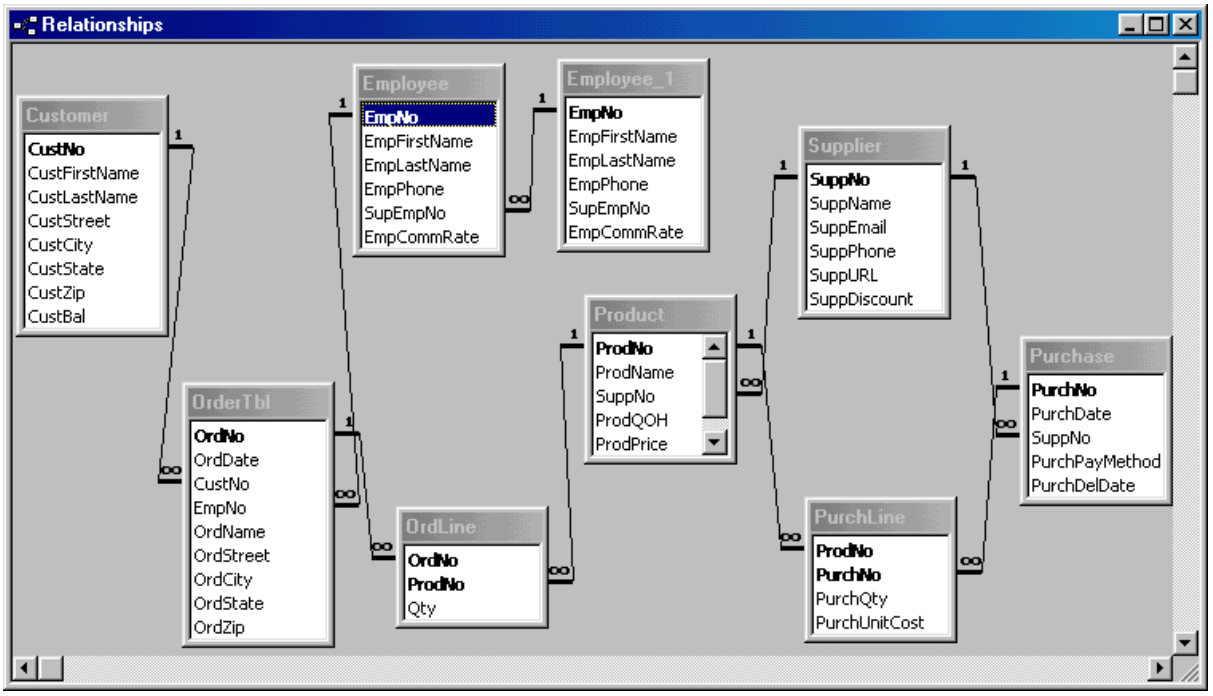
การบ้านแบบคู่ ส่ง พฤหัสที่ 5 เมษา นี้



พิจารณาโครงสร้างข้อมูลข้างต้น แล้วตอบคำถาม

1. Write a PL/SQL procedure to insert a new row into the Product table using input parameters for the product number, product name, product price, next ship date, quantity on hand, and supplier number. For a successful insert, display an appropriate message. If an error occurs in the INSERT statement, raise an exception with an appropriate error message.

2. Revise problem 1 to generate an output value instead of displaying a message about a successful insert. In addition, the revised procedure should catch a duplicate primary key error (เลือกจาก Common Predefined Exceptions ในสไลด์หน้า 32). If the user tries to insert a row with an existing product number, your procedure should raise an exception with an appropriate error message.

3. Write a trigger to propagate updates to the Product table after delete operations on the PurchLine table. The quantity on hand (ProdQOH) should increase by the old purchase quantity (PurchQty).

4. ข้อนี้ให้ฝึกเขียนโปรแกรมโดยใช้ Cursor ไม่ต้องส่ง

Write a function to compute the median of the customer balance column. The median is the middle value in a list of numbers. If the list size is even, the median is the average of the two middle values. For example, if there are 18 customer balances, the median is the average of the ninth and tenth balances. You should use an implicit cursor in your function. You may want to use the Oracle (หรืออื่นๆ) SQL functions *Trunc* and *Mod* in writing your function. Write a test script for your function. Note that this function does not have any parameters. Do not use parentheses in the function declaration or in the function invocation when a function does not have parameters.

```
-- Test Script for (4.)
-- Even number of customers: 16
        SELECT COUNT(*) FROM Customer;
        SELECT CustBal FROM Customer ORDER BY CustBal;

        BEGIN
        dbms_output.put_line('Median is '||to_char( fn_DetermineMedianBal ));
        END;
        /
-- Odd number of customers: 17
        INSERT INTO Customer(CustNo, CustBal)
          VALUES('11122200', 350);
        SELECT COUNT(*) FROM Customer;
        SELECT CustBal FROM Customer ORDER BY CustBal;

        BEGIN
        dbms_output.put_line('Median is '||to_char( fn_DetermineMedianBal ));
        END;
        /
```