Consider the following relations for the Bakery database:

**CUSTOMERS (*cid,* fname, lname)**

**PRODUCTS (*pid,* flavor, food, price)**

**RECEIPTS (*rno*, rdate, cid)**

**ITEM_LIST (*rno, ordinal*, item)**

***Note:***
a. Use implicit/explicit cursor wherever required.
b. Use IN, OUT, INOUT as parameter type wherever needed.

Write a PL/SQL stored procedure for the following:

1. For the given receipt number, calculate the Discount as follows:

   For total amount > \$10 and total amount < \$25:  Discount=5%

   For total amount > \$25 and total amount < \$50:  Discount=10%

   For total amount > \$50: Discount=20%

   Calculate the amount (after the discount) and update the same in Receipts table.

   Print the receipt as shown below:

```
************************************************************
Receipt Number:13355           Customer Name: TOUSSAND SHARRON
Receipt Date :19-Oct-2007
************************************************************
Sno     Flavor     Food       Price
1.      Opera      Cake       15.95
2.      Lemon      Cookie      0.79
3.      Napoleon   Cake       13.49
------------------------------------------------------------
                Total =  $ 30.23
------------------------------------------------------------
Total Amount       :$ 30.23
Discount(10%)      :$  3.02
------------------------------------------------------------
Amount to be paid  :$ 27.21
************************************************************
Great Offers! Discount up to 25% on DIWALI Festival Day...
************************************************************
```

2. Ask the user for the *budget* and his/her preferred *food type*. You recommend the best item(s) within the planned budget for the given food type. The best item is determined by the maximum ordered product among many customers for the given food type.

Print the recommended product that suits your budget as below:

```
*********************************************************
Budget: $10                           Food type: Meringue
*********************************************************
Item ID          Flavor     Food        Price
70-M-CH-DZ       Chocolate  Meringue    1.25
70-M-VA-SM-DZ    Vanilla    Meringue    1.15
---------------------------------------------------------
70-M-CH-DZ with Chocolate flavor is the best item in Meringue type!
You are entitled to purchase 8 Meringue chocolates for the given
budget !!!
*********************************************************
```

3. Take a receipt number and item as arguments, and insert this information into the Item list. However, if there is already a receipt with that receipt number, then keep adding 1 to the maximum ordinal number. Else before inserting into the Item list with ordinal as 1, ask the user to give the customer name who placed the order and insert this information into the Receipts.

4. Write a stored function to display the customer name who ordered maximum for the given food and flavor.

5. Implement Question (2) using stored function to return the amount to be paid and update the same, for the given receipt number.

What you have to submit:

1. Schema Diagram with constraints
2. Demo script file