1. Briefly mention the differences between a PL/SQL procedure and a function.

2. Scenario: Online Bookstore Database

   You need to create a database for an online bookstore. The database should store information about books, authors, customers, and orders. Here's a simplified schema for the database:

   Tables:

   a. Books:
      - Columns:
        - book_id (Primary Key)
        - title (Title of the book)
        - author_id (Foreign Key referencing the Authors table)
        - price (Price of the book)
        - publication_date (Date of publication)

   b. Authors:
      - Columns:
        - author_id (Primary Key)
        - first_name (Author's first name)
        - last_name (Author's last name)

   c. Customers:
      - Columns:
        - customer_id (Primary Key)
        - first_name (Customer's first name)
        - last_name (Customer's last name)

   d. Orders:
      - Columns:
        - order_id (Primary Key)
        - customer_id (Foreign Key referencing the Customers table)
        - order_date (Date of the order)

   e. Order_Details:
      - Columns:
        - order_detail_id (Primary Key)
        - order_id (Foreign Key referencing the Orders table)
        - book_id (Foreign Key referencing the Books table)
        - quantity (Quantity of books ordered)
        - unit_price (Price per book at the time of order)

Data:

Insert some books, authors, customers, and orders data into their respective tables. Create relationships between the tables, ensuring that foreign keys are properly set to maintain data integrity.

I. Create a sequence and automatically add the *book_id* while inserting a new entry to the 'Books' table.

II. Implement a loyalty points system for the online bookstore. Loyalty points should be awarded to customers based on their total spending on books. The system should work as follows:
- Customers earn 1 loyalty point for every $10 spent on books.
- Customers who have accumulated at least 1000 loyalty points can redeem their points for a discount on their next purchase. For every 1000 points, they receive a $10 discount.
- Design and implement a PL/SQL function to update the Customers and Orders tables to award and redeem loyalty points for customers.

The function should take the customer_id as a parameter and perform the following actions:
1. Calculate the total spending of the customer based on the orders in the Order_Details table.
2. Award the customer the appropriate number of loyalty points based on their spending.
3. Update the customer's loyalty points in the Customers table.
4. If the customer has accumulated enough points, apply a discount to their next order and deduct the redeemed points from their loyalty balance.

Additionally, you should handle scenarios where:
1. A customer makes a new order, which should trigger an update to their loyalty points.
2. A customer redeems points for a discount on their next order.

Create the PL/SQL function that implements this loyalty points system and apply it to update the tables accordingly.

III. Write a PL/SQL block that uses an explicit cursor with parameters to retrieve all orders for a specific customer and find the total expenditure of the customer based on the *customer_id*. The cursor should accept the *customer_id* as a parameter and return the order details for that customer.