**Database Flow Values**

Based on the processes outlined:

1. **Login Process (Process 1):**
   * Input: User credentials (username, password)
   * Output: Authentication status (logged in / error)
   * Database Interaction: Query the users table to verify credentials.
2. **View Assets Process (Process 2):**
   * Input: User request to view assets
   * Output: List of available assets
   * Database Interaction: Query the assets table for available assets (status = 'Available').
3. **Borrow Asset Process (Process 3):**
   * Input: Asset borrowing request (user ID, asset ID)
   * Output: Asset status updated (borrowed)
   * Database Interaction: Update assets table (set status = 'Borrowed', update borrowed\_by and borrowed\_date).
4. **Return Asset Process (Process 4):**
   * Input: Asset return request (user ID, asset ID)
   * Output: Asset status updated (available)
   * Database Interaction: Update assets table (set status = 'Available', clear borrowed\_by and borrowed\_date).
5. **Overdue Notifications Process (Process 5):**
   * Input: Overdue asset information
   * Output: Notification to user about overdue assets
   * Database Interaction: Check for assets with overdue status and send notifications based on the return\_date and current date.
6. **Admin Asset Management Process (Process 6):**
   * Input: Admin request to manage inventory (add/update/remove asset)
   * Output: Asset inventory updated
   * Database Interaction: Insert/Update/Delete records in the assets table.
7. **Finance and Loss Reporting Process (Process 7):**
   * Input: Loss or damage report, fines information
   * Output: Financial records and penalties
   * Database Interaction: Insert into transactions table with fine details.
8. **Transaction Logging Process (Process 8):**
   * Input: Borrowing, returning, and fines data
   * Output: Transaction log
   * Database Interaction: Insert into transactions table.

**Database Schema:**







