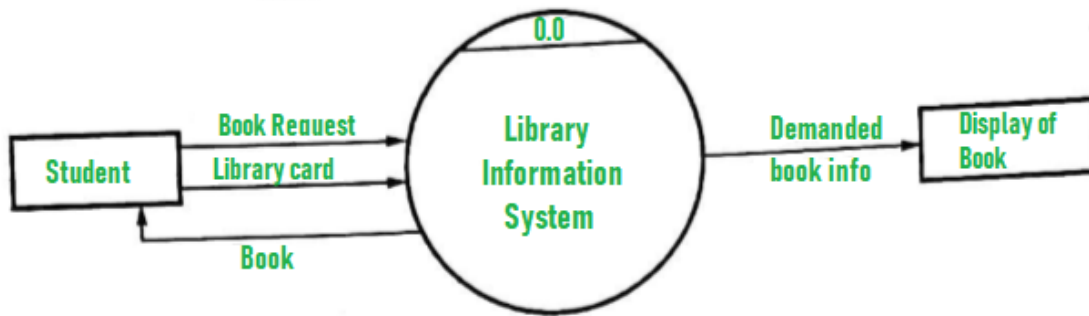# Practical no:8

Aim:Draw the function oriented diagram: Data Flow Diagram (DFD) .
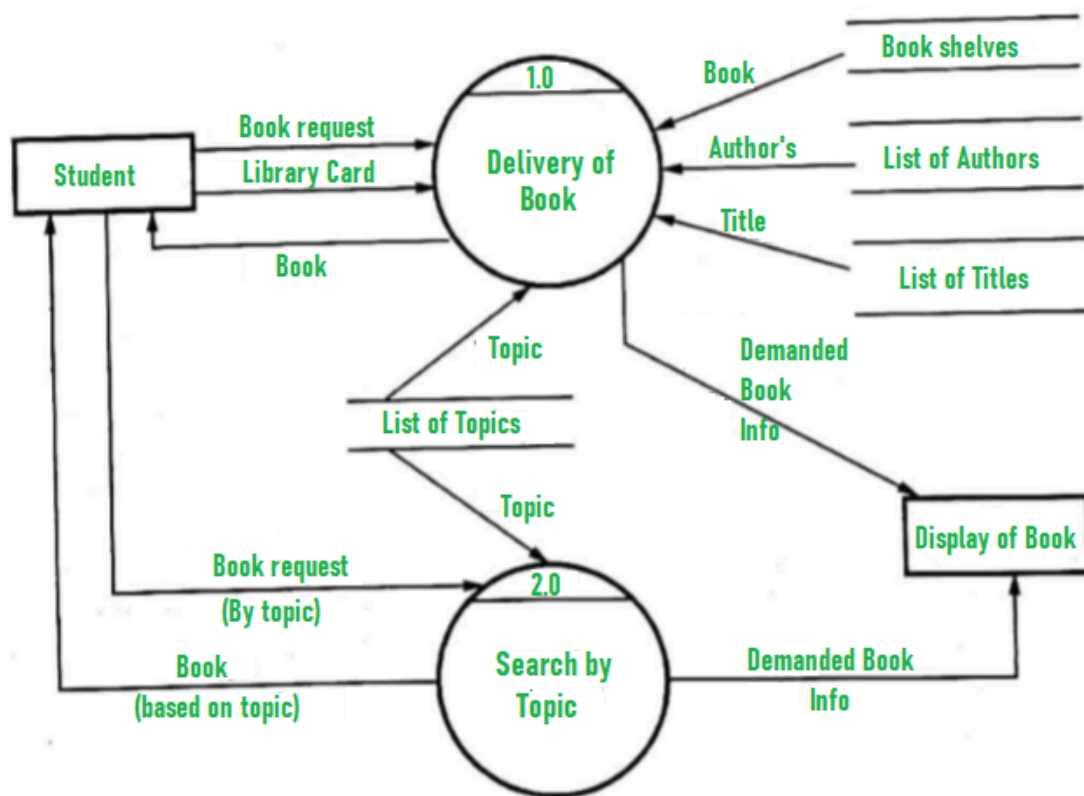
1.Level 0 DFD:

This **Data Flow Diagram (DFD)** shows how a **Library Information System** works:

1. **Student** requests a book using a **Library Card**.
2. The **Library Information System** processes the request.
3. The system retrieves and displays **book information**.
4. If issued, the **book** is given to the student.

It visually represents the flow of book requests and information.

2.Level 1 DFD:

This **Level 1 Data Flow Diagram (DFD)** for a **Library Information System** breaks down the process into two main functions:
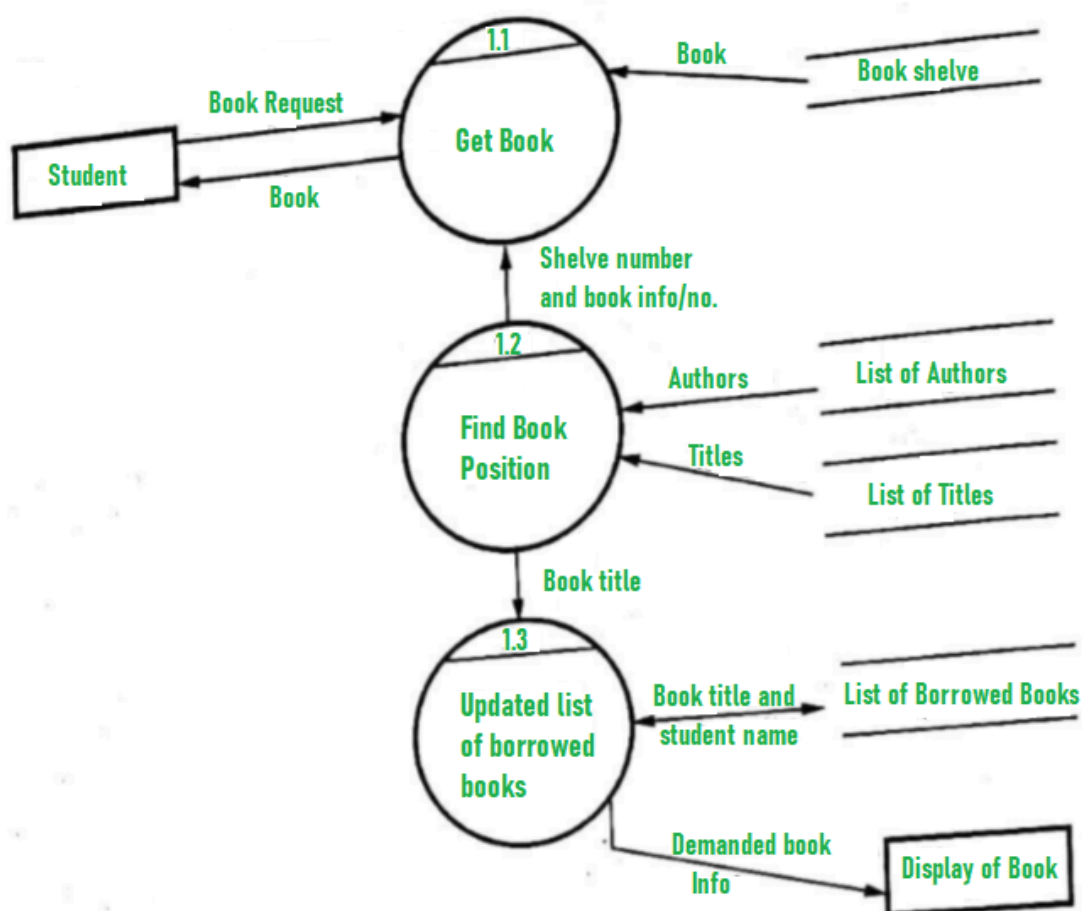
1. **Delivery of Book (1.0)**

   - The **Student** requests a book using a **Library Card**.
   - The system retrieves book details from **Book Shelves, Authors, and Titles**.
   - The book or its information is provided to the student.

2. **Search by Topic (2.0)**

   - The student can request a book by **Topic**.
   - The system searches for books based on the topic and retrieves book details.
   - The demanded book information is sent to the **Display of Book**.

This DFD shows how books are searched, requested, and delivered in a library system.

3.Level 2 DFD:

Level 2 DFD

This **Level 2 DFD** represents the detailed process of how a student borrows a book from the **Library Information System**:

1. **Get Book (1.1)** – The student requests a book, and the system retrieves book details from the **Book Shelf**.
2. **Find Book Position (1.2)** – The system locates the book by checking the **List of Authors** and **List of Titles**, then identifies the shelf number.
3. **Updated List of Borrowed Books (1.3)** – After issuing the book, the system updates the **List of Borrowed Books** with the student's name and book title.
4. **Display of Book** – The demanded book information is sent for display.

This diagram details the book retrieval and borrowing process.