**GENRE**

**AUTHORS**

**BOOKS**

**Loans**

**BRANCH**

**PATRONS**

***Discussion Questions:***

1/ I would modify the schema to track the actual inventory at each branch by adding a copy owned field to the branches tables.

2/ we could write queries to find out the best performing book / genre in each branch and overall, this is to optimize inventory. Also, in order to better understand patrons behavior we could write a query to find identify a preferred genre for each patron .

3/for reserved books I would add a field in the books table for number of times a book was reserved or a field in the patron table how many times a patron reserved a book to identify the most engaging patrons and the least engaging patrons and invite the latter to organized library programs in order to promote library use, late fees can be just calculated with the just the available data right now we just need to set a standard late fee rate for every day / week a book was returned late we would start by calculating the number of days between the due date and the return date then multiply that by the rate or the due date by today’s date to calculate the current late fee, for library program attendance we would need to record the attendance ibn those programs then add a field named program participation in the patron table add a point each time a patron attends a program.

4/ first I would define recent by lets say has been published in the last 10 years

Then the query qould look like this :

SELECT

publication\_year,

title

from books

WHERE title like '%History%' and publication\_year >= 2015

ORDER by publication\_year desc;

/5 I think what is most important is reducing the load on your query you do that by indexing and conditions and specifying which fields / rows your code needs to scan the more precise you are in indexing and having specific conditions the faster and more exact your output is going to come out.