

BOOK TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'book' table is selected, and its structure and data are displayed. The table has columns: BOOK_ID, TITLE, PUB_YEAR, and PUBLISHER_NAME. The data is as follows:

BOOK_ID	TITLE	PUB_YEAR	PUBLISHER_NAME
1	DBMS	JAN-2017	MCGRAW-HILL
2	ADBMS	JUN-2016	MCGRAW-HILL
3	CN	SEP-2016	PEARSON
4	CG	SEP-2015	GRUPO PLANETA
6	DBMS	JAN-2017	MCGRAW-HILL
7	DBMS	JAN-2017	MCGRAW-HILL
8	ADBMS	JUN-2016	MCGRAW-HILL
9	CN	SEP-2016	PEARSON
10	CG	SEP-2015	GRUPO PLANETA
11	OS	MAY-201	PEARSON

BOOK_AUTHORS TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'book_authors' table is selected, and its structure and data are displayed. The table has columns: AUTHOR_NAME and BOOK_ID. The data is as follows:

AUTHOR_NAME	BOOK_ID
NAVATHE	1
NAVATHE	2
TANENBAUM	3
EDWARD ANGEL	4
GALVIN	5

BOOK_COPIES TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'book_copies' table is selected, and the 'Structure' tab is active. The table contains 7 rows. The SQL query shown is 'SELECT * FROM `book_copies`'. The table structure is as follows:

NO_OF_COPIES	BOOK_ID	BRANCH_ID
10	1	10
5	1	11
2	2	12
5	2	13
7	3	14
3	4	11
1	5	10

BOOK_LENDING TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'book_lending' table is selected, and the 'Structure' tab is active. The table contains 5 rows. The SQL query shown is 'SELECT * FROM `book_lending` ORDER BY `BOOK_ID` DESC'. The table structure is as follows:

DATE_OUT	DUE_DATE	BOOK_ID	BRANCH_ID	CARD_NO
2017-05-15	2017-07-15	4	11	101
2017-01-11	2017-03-11	3	14	101
2017-02-21	2017-04-21	2	13	101
2017-04-12	2017-05-12	1	11	104
2017-01-12	2017-06-12	1	10	101

CARD TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'card' table is selected, and its structure is displayed. The table has a primary key 'CARD_ID' and a foreign key 'BRANCH_ID' referencing the 'library_branch' table. The data view shows 5 rows.

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total. Query took 0.0018 seconds.)

```
SELECT * FROM `card`
```

Options: ☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

CARD_ID
100
101
102
103
104

Query results operations: [Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Bookmark this SQL query

LIBRARY_BRANCH TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'library_branch' table is selected, and its structure is displayed. The table has a primary key 'BRANCH_ID' and columns 'BRANCH_NAME' and 'ADDRESS'. The data view shows 5 rows.

Showing rows 0 - 4 (5 total. Query took 0.0017 seconds.)

```
SELECT * FROM `library_branch`
```

Options: ☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

	BRANCH_ID	BRANCH_NAME	ADDRESS
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	RR NAGAR	BANGALORE
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	AMCEC	BANGALORE
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	RAJAJI NAGAR	BANGALORE
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13	NITTE	MANGALORE
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	14	MANIPAL	UDUPI

Query results operations: [Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Console

PUBLISHER TABLE:

The screenshot shows the phpMyAdmin interface for the 'library' database. The 'publisher' table is selected, and the data is displayed in a table format. The table has columns: NAME, PHONE, and ADDRESS. The data is as follows:

NAME	PHONE	ADDRESS
GRUPO PLANETA	2147483647	BANGALORE
HACHETTE LIVRE	2147483647	CHENAI
manikanta	2147483647	BANGALORE
PEARSON	2147483647	NEWDELHI
RANDOM HOUSE	2147483647	HYDRABAD

1. Retrieve details of all books in the library – id, title, name of publisher, authors, number of copies in each branch, etc.

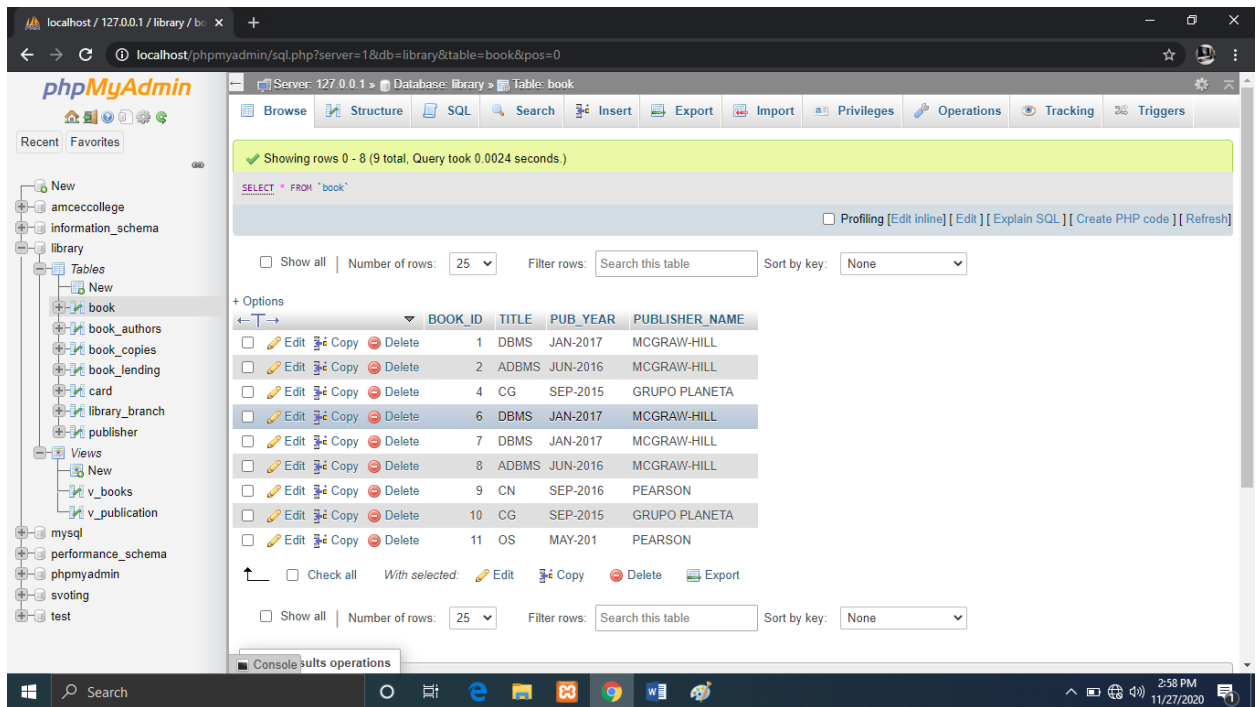
The screenshot shows the phpMyAdmin interface for the 'library' database. A complex SQL query is executed, and the results are displayed in a table format. The query is:

```
SELECT B.BOOK_ID, B.TITLE, B.PUBLISHER_NAME, A.AUTHOR_NAME, C.NO_OF_COPIES, L.BRANCH_ID FROM BOOK B, BOOK_AUTHORS A, BOOK_COPIES C, LIBRARY_BRANCH L WHERE B.BOOK_ID=A.BOOK_ID AND B.BOOK_ID=C.BOOK_ID AND L.BRANCH_ID=C.BRANCH_ID
```

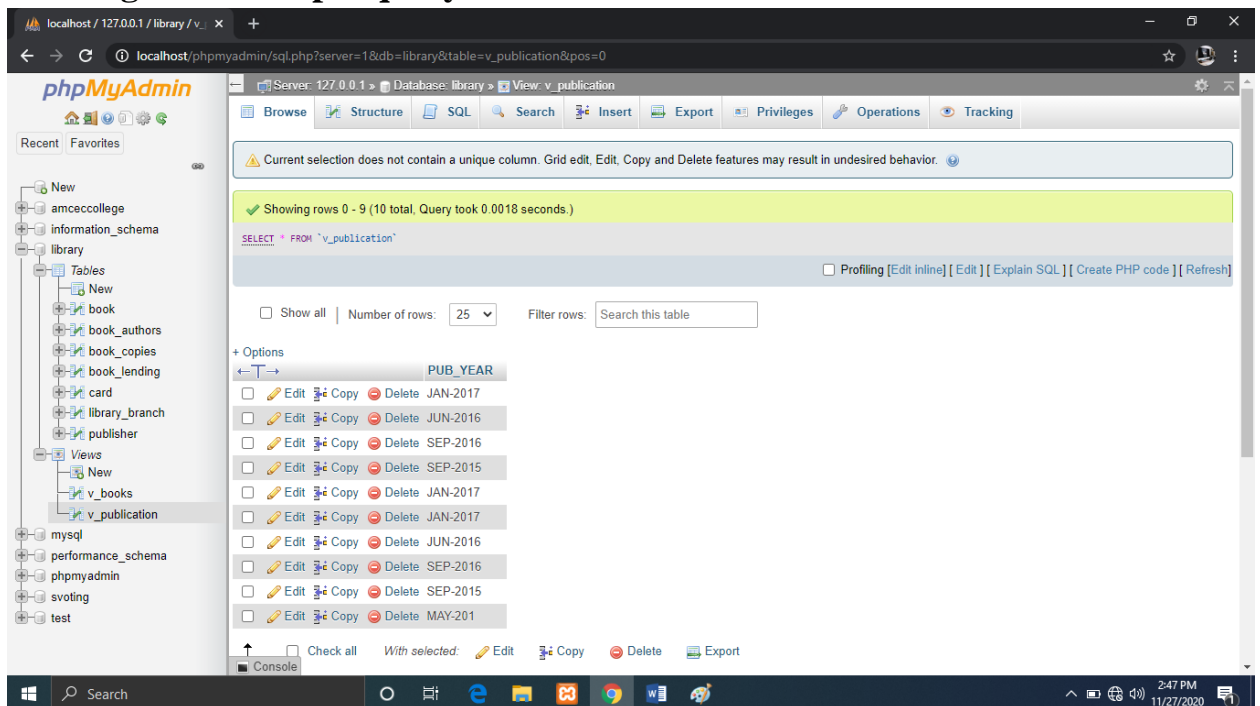
The results are as follows:

BOOK_ID	TITLE	PUBLISHER_NAME	AUTHOR_NAME	NO_OF_COPIES	BRANCH_ID
1	DBMS	MCGRAW-HILL	NAVATHE	10	10
1	DBMS	MCGRAW-HILL	NAVATHE	5	11
2	ADBMS	MCGRAW-HILL	NAVATHE	2	12
2	ADBMS	MCGRAW-HILL	NAVATHE	5	13
3	CN	PEARSON	TANENBAUM	7	14
4	CG	GRUPO PLANETA	EDWARD ANGEL	3	11

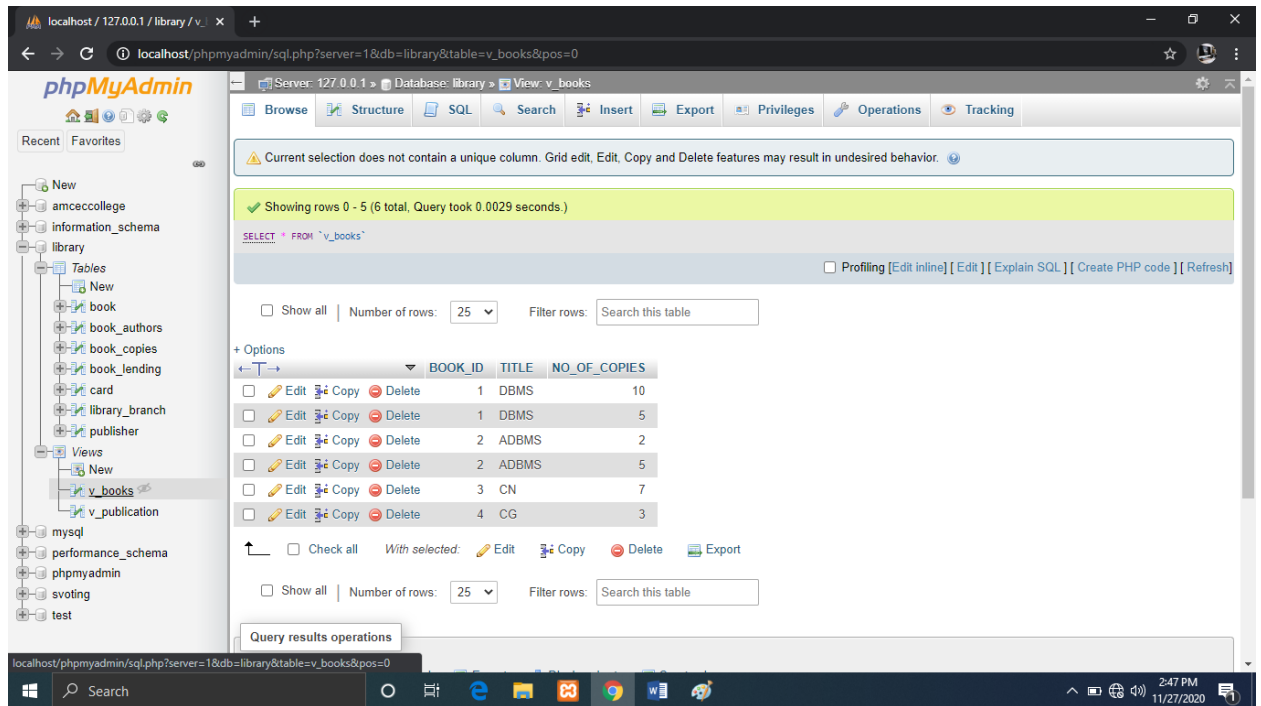
2. Delete a book in BOOK table. Update the contents of other tables to reflect this data manipulation operation.



3. Partition the BOOK table based on year of publication. Demonstrate its working with a simple query.



4. Create a view of all books and its number of copies that are currently available in the Library.



The screenshot shows the phpMyAdmin interface for a database named 'library'. A view named 'v_books' is selected, displaying a table with the following data:

BOOK_ID	TITLE	NO_OF_COPIES
1	DBMS	10
1	DBMS	5
2	ADBMS	2
2	ADBMS	5
3	CN	7
4	CG	3

The interface includes a left sidebar with a tree view of the database structure, a top navigation bar with tabs like 'Browse', 'Structure', 'SQL', etc., and a main content area showing the view's details and data. A warning message at the top states: 'Current selection does not contain a unique column. Grid edit, Edit, Copy and Delete features may result in undesired behavior.'