

# Problem 3570: Find Books with No Available Copies

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 53.09%

**Paid Only:** No

**Tags:** Database

## Problem Description

Table: `library\_books`

Column Name	Type
book_id	int
title	varchar
author	varchar
genre	varchar
publication_year	int
total_copies	int

book\_id is the unique identifier for this table. Each row contains information about a book in the library, including the total number of copies owned by the library.

Table: `borrowing\_records`

Column Name	Type
record_id	int
book_id	int
borrower_name	varchar
borrow_date	date
return_date	date

record\_id is the unique identifier for this table. Each row represents a borrowing transaction and return\_date is NULL if the book is currently borrowed and hasn't been returned yet.

Write a solution to find \*\*all books\*\* that are \*\*currently borrowed (not returned)\*\* and have \*\*zero copies available\*\* in the library.

\* A book is considered \*\*currently borrowed\*\* if there exists a\*\*\*\* borrowing record with a \*\*NULL\*\* `return\_date`

Return \_the result table ordered by current borrowers in\*\*descending\*\* order, then by book title in \*\*ascending\*\* order.\_

The result format is in the following example.

### **\*\*Example:\*\***

**\*\*Input:\*\***

## library books table:

book_id
title   author   genre   publication_year   total_copies
The Great Gatsby   F. Scott   Fiction   1925   3   2   To Kill a Mockingbird   Harper Lee   Fiction   1960   3   3   1984   George Orwell   Dystopian  1949   1   4   Pride and Prejudice   Jane Austen   Romance   1813   2   5   The Catcher in the Rye   J.D. Salinger   Fiction   1951   1   6   Brave New World   Aldous Huxley   Dystopian  1932   4

borrowing records table:

## \*\*Output:\*\*

```
+-----+-----+-----+-----+-----+ | book_id | title |
author | genre | publication_year | current_borrowers |
+-----+-----+-----+-----+-----+ | 1 | The Great
Gatsby | F. Scott | Fiction | 1925 | 3 | 3 | 1984 | George Orwell | Dystopian | 1949 | 1 |
+-----+-----+-----+-----+-----+
```

## **\*\*Explanation:\*\***

\* \*\*\*The Great Gatsby (book\_id = 1):\*\*\* \* Total copies: 3 \* Currently borrowed by Alice Smith, Bob Johnson, and Grace Miller (3 borrowers) \* Available copies:  $3 - 3 = 0$  \* Included because available copies = 0 \* \*\*\*1984 (book\_id = 3):\*\*\* \* Total copies: 1 \* Currently borrowed by David

Brown (1 borrower) \* Available copies: 1 - 1 = 0 \* Included because available\_copies = 0 \*  
\*\*Books not included:\*\* \* To Kill a Mockingbird (book\_id = 2): Total copies = 3, current  
borrowers = 2, available = 1 \* Pride and Prejudice (book\_id = 4): Total copies = 2, current  
borrowers = 1, available = 1 \* The Catcher in the Rye (book\_id = 5): Total copies = 1, current  
borrowers = 0, available = 1 \* Brave New World (book\_id = 6): Total copies = 4, current  
borrowers = 1, available = 3 \* \*\*Result ordering:\*\* \* The Great Gatsby appears first with 3  
current borrowers \* 1984 appears second with 1 current borrower

Output table is ordered by current\_borrowers in descending order, then by book\_title in  
ascending order.

## Code Snippets

### MySQL:

```
# Write your MySQL query statement below
```

### MS SQL Server:

```
/* Write your T-SQL query statement below */
```

### PostgreSQL:

```
-- Write your PostgreSQL query statement below
```