**SQL EXERCISE**

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Retrieve the required information using SQL language.

Use the functions in the below URL for reference:

<http://dev.mysql.com/doc/refman/5.5/en/functions.html>

1. How many copies of the book titled The Lost Tribe are owned by the library branch whose name is "Sharpstown"?

SELECT noOfCopies

FROM tbl\_book\_copies

NATURAL JOIN tbl\_library\_branch

NATURAL JOIN tbl\_book

WHERE branchName = "Sharpstown" AND title = "The Lost Tribe";

1. How many copies of the book titled The Lost Tribe are owned by each library branch?

SELECT branchName, noOfCopies

FROM tbl\_book\_copies

NATURAL JOIN tbl\_library\_branch

NATURAL JOIN tbl\_book

WHERE title = "The Lost Tribe";

GROUP BY branchName;

1. Retrieve the names of all borrowers who do not have any books checked out .

**SELECT name**

**FROM tbl\_borrower**

**WHERE name not in (**

**SELECT name**

**FROM tbl\_borrower**

**NATURAL JOIN tbl\_book\_loans**

**);**

1. For each book that is loaned out from the "Sharpstown" branch and whose DueDate is today, retrieve the book title, the borrower's name, and the borrower's address.

SELECT title, name, address

FROM tbl\_book\_loans

NATURAL JOIN tbl\_library\_branch

NATURAL JOIN tbl\_borrower

NATURAL JOIN tbl\_book

WHERE branchName = "Sharpstown" AND DATEDIFF(dueDate, CURDATE()) = 0;

1. For each library branch, retrieve the branch name and the total number of books loaned out from that branch.

SELECT branchName, COUNT(\*)

FROM tbl\_book\_loans

NATURAL JOIN tbl\_library\_branch

GROUP BY branchId;

1. Retrieve the names, addresses, and number of books checked out for all borrowers who have more than five books checked out.

SELECT name, address, COUNT(\*)

FROM tbl\_book\_loans

NATURAL JOIN tbl\_borrower

WHERE dateIn = NULL

GROUP BY cardNo

HAVING COUNT(\*) > 5;

1. For each book authored (or co-authored) by "Stephen King", retrieve the title and the number of copies owned by the library branch whose name is "Central"

**SELECT title, noOfCopies**

**FROM tbl\_book\_copies**

**NATURAL JOIN tbl\_library\_branch**

**NATURAL JOIN tbl\_book\_authors**

**NATURAL JOIN tbl\_author**

**NATURAL JOIN tbl\_book**

**WHERE authorName = "Stephen King" AND branchName = "Central";**