**SQL EXERCISE**

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 ( (BOOK NATURAL JOIN BOOK\_COPIES ) NATURAL JOIN LIBRARY\_BRANCH )

WHERE Title='The Lost Tribe' AND BranchName='Sharpstown'

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

SELECT BranchName, NoOfCopies FROM ( (BOOK NATURAL JOIN BOOK\_COPIES ) NATURAL JOIN LIBRARY\_BRANCH )

WHERE Title='The Lost Tribe'

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

SELECT Name FROM BORROWER B

WHERE NOT EXIST ( SELECT \* FROM BOOK\_LOANS L WHERE B.CardNo = L.CardNo )

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 B.Title, R.Name, R.Address FROM BOOK B, BORROWER R, BOOK\_LOANS BL, LIBRARY\_BRANCH LB

WHERE LB.BranchName='Sharpstown' AND LB.BranchId=BL.BranchId AND BL.DueDate='today' AND BL.CardNo=R.CardNo AND BL.BookId=B.BookId

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

SELECT L.BranchName, COUNT(\*) FROM BOOK\_LOANS B, LIBRARY\_BRANCH L

WHERE B.BranchId = L.BranchId

GROUP BY L.BranchName

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

SELECT B.Name, B.Address, COUNT(\*) FROM BORROWER B, BOOK\_LOANS L

WHERE B.CardNo = L.CardNo

GROUP BY B.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 ( ( (BOOK\_AUTHORS NATURAL JOIN BOOK) NATURAL JOIN BOOK\_COPIES)

NATURAL JOIN LIBRARY\_BRANCH)

WHERE Author\_Name = ‘Stephen King' and BranchName = 'Central’