BRAC UNIVERSITY
Inspiring Excellence

Name:	ID:	Section:

Question 1 [CO2] [10 Points]

Design the **LibraryManager** class with appropriate instance variables and methods to generate the expected output.

Tester Code	Expected Output
| ```java
public class LibraryTester {
    public static void main(String[] args)
{
        LibraryManager branch1 = new
LibraryManager();
        branch1.setupBranch("Central
Library", "Banani");

        System.out.println("1----------");
        branch1.showSummary();

        System.out.println("2----------");
        branch1.borrowBook("Alice", "Java
Programming", 2);

        System.out.println("3----------");
        branch1.showSummary();

        System.out.println("4----------");
        branch1.borrowBook("Bob", "Data
Structures", 1, "Charlie", "Algorithms",
3);

        System.out.println("5----------");
        branch1.showSummary();

        System.out.println("6----------");
        branch1.borrowBook("Diana",
"Discrete Math", 2);
        branch1.borrowBook("Ethan",
"Database Management", 1);

        System.out.println("7----------");
        branch1.showSummary();

    }
}
``` | ```
1----------
Branch Name: Central Library
Location: Banani
Total Readers Today: 0
Reader List:
Total Books Borrowed: 0
2----------
Hello Alice, you've borrowed 2 book titled
'Java Programming'.
3----------
Branch Name: Central Library
Location: Banani
Total Readers Today: 1
Reader List:
Name: Alice, Books: 2, Book Name: Java
Programming
Total Books Borrowed: 2
4----------
Hello Bob, you've borrowed 1 book titled 'Data
Structures'.
Hello Charlie, you've borrowed 3 book titled
'Algorithms'.
5----------
Branch Name: Central Library
Location: Banani
Total Readers Today: 3
Reader List:
Name: Alice, Books: 2, Book Name: Java
Programming
Name: Bob, Books: 1, Book Name: Data Structures
Name: Charlie, Books: 3, Book Name: Algorithms
Total Books Borrowed: 6
6----------
Hello Diana, you've borrowed 2 book titled
'Discrete Math'.
Sorry, daily reader limit reached!
7----------
Branch Name: Central Library
Location: Banani
Total Readers Today: 4
Reader List:
Name: Alice, Books: 2, Book Name: Java
Programming
Name: Bob, Books: 1, Book Name: Data Structures
Name: Charlie, Books: 3, Book Name: Algorithms
Name: Diana, Books: 2, Book Name: Discrete Math
Total Books Borrowed: 8
``` |

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