**Module: R1: C Programming**

**Section:** C Inline Functions, Structures **Task:** 3.2

**Task 3.2**

**Library Management System**

**Intro:**

The program first asks the user to choose an operation (book details or check availability). Then, it prompts the user to select a specific book from the LMS. The code then uses the user's choices to determine which operation to perform on the selected book.

**Explanation:**

This program manages a simple Library Management System (LMS). It takes user input to choose an operation and a book.

Here's a breakdown:

1. **int option**: This section gets the user's choice for an operation. The user is prompted to select either "1. Book Details" or "2. Check Available Copies". The input is stored in the option variable.
2. **char c**: This section gets the user's choice of a book from the LMS. The user is prompted to choose from "A, B, or C". The chosen letter (case-insensitive) is stored in the c variable.
3. **c = tolower(c)**: This line converts the entered book choice character (e.g., 'A', 'B', 'C') to lowercase. This is done to make the input case-insensitive (so the user can enter 'a', 'b', or 'c' as well).

**Function Definitions:**

#include<stdio.h>

#include "lms.h"

inline int is\_copies\_available(Book x){

if (x.copies\_available >= 1){

printf("Yes, %d Copies are available.\n", x.copies\_available);

}

else{

printf("No Copies Available.\n");

}

return 0;

}

inline Book print\_book\_details (Book y){

printf("\n--------Book Details--------\n");

printf("Title: %s\n", y.title);

printf("Author: %s\n", y.author);

printf("ISBN: %s\n", y.ISBN);

printf("Publication Year: %d\n", y.publication\_year);

printf("Genre: %s\n", y.genre);

printf("Copies Available: %d\n", y.copies\_available);

}

