

# Library Book Management System – Project Report

## 1. Introduction

This project is a simple Library Book Management System designed for the Introduction to Programming course.

It allows storing book information, viewing all available books, and searching books by title or author.

## 2. Problem Definition

Managing books manually is slow and error-prone. A basic digital tool is needed for efficiency.

## 3. Objectives

- Add books
- View books
- Search books
- Simple interface

## 4. Requirements

Functional:

- Add book
- View book list
- Search book
- Exit program

Non-Functional:

- Easy to use
- Accurate search

## 5. Top-Down Design

Modules:

- add\_book()
- view\_books()
- search\_book()
- menu()

## 6. Algorithm

1. Start
2. Show menu
3. Choose option
4. Perform selected task
5. Repeat
6. Exit

## 7. Implementation

Python lists and dictionaries used.

## 8. Testing

Tested with:

- Multiple entries
- Search keywords

## 9. Conclusion

Project demonstrates programming fundamentals and provides a simple solution.