

```
#include <iostream>
#include <string>
#include <vector>
#include <algorithm>

class Book {
private:
    std::string title;
    std::string author;
    std::string isbn;
    bool isIssued;

public:
    Book(std::string t, std::string a, std::string i)
        : title(t), author(a), isbn(i), isIssued(false) {}

    std::string getTitle() const { return title; }
    std::string getAuthor() const { return author; }
    std::string getISBN() const { return isbn; }
    bool getStatus() const { return isIssued; }

    void issueBook() { isIssued = true; }
    void returnBook() { isIssued = false; }

    void display() const {
        std::cout << "Title: " << title << ", Author: " << author
        << ", ISBN: " << isbn << ", Status: "
        << (isIssued ? "Issued" : "Available") << std::endl;
    }
};

class Library {
private:
    std::vector<Book> books;
```

```
public:
```

```
void addBook(const Book& book) {
    books.push_back(book);
    std::cout << "Book added successfully." << std::endl;
}

void searchByISBN(const std::string& isbn) {
    auto it = std::find_if(books.begin(), books.end(), [&](const Book& b){
        return b.getISBN() == isbn;
    });

    if (it != books.end()) {
        it->display();
    } else {
        std::cout << "No book found with that ISBN." << std::endl;
    }
}

void displayAllBooks() const {
    std::cout << "\n--- Library Catalog ---" << std::endl;
    for (const auto& book : books) {
        book.display();
    }
    std::cout << "-----" << std::endl;
}

int main() {
    Library myLibrary;

    myLibrary.addBook(Book("Objectorientedprogramming", "Daniel ", "97800000"));
    myLibrary.addBook(Book("c++ programming", "Jane", "97845000"));
}
```

```
myLibrary.displayAllBooks();
myLibrary.searchByISBN("97800000");

return 0;
}
```