Task

1) Create a library management using interface which can do borrow ,return and details.

Program:

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace LibraryManagement
{
    internal class Book
    {
        private int id;
        private string? title;
        private string? author;
        private bool isAvailable;

        public Book(int id, string? title, string? author, bool isAvail)
        {
            this.Id = id;
            this.Title = title;
            this.Author = author;
            this.IsAvailable = isAvailable;
        }

        public int Id { get => id; set => id = value; }
        public string? Title { get => title; set => title = value; }
        public string? Author { get => author; set => author = value; }
        public bool IsAvailable { get => isAvailable; set => isAvailable = value; }

        internal static void Ilend(string title)
        {
            int count = 0;
            foreach (Book i in Library.book)
            {
                if (i.Title.Equals(title))
                {
                    i.IsAvailable = false;
                    Console.WriteLine("Borrowed");
                    count++;
                }
            }
            if(count==0) { Console.WriteLine("Book not Available"); }
        }

    }
```

```csharp
        }

using System;
using System.Collections;
using System.Collections.Generic;
using System.Linq;
using System.Security.Cryptography.X509Certificates;
using System.Text;
using System.Threading.Tasks;

namespace LibraryManagement
{
    internal class Library
    {
        public static ArrayList book = new ArrayList();
        public static void BorrowBook(string title)
        {
            Book.Ilend(title);
        }

        public static void ReturnBook(string title)
        {
            foreach (Book i in book)
            {
                if (i.Title.Equals(title))
                {
                    i.IsAvailable = true;
                    Console.WriteLine("Returned");
                }
            }

        }
        public static void DisplayBookDetails()
        {
            foreach (Book i in book)
            {
                Console.WriteLine("Title :" +i.Title + " Author :" +
i.Author + " Availablity " + i.IsAvailable);
            }
        }
    }
}

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace LibraryManagement
{
    internal interface Ilendable
    {
        public abstract static void Ilend(string? title);
    }
}

// See https://aka.ms/new-console-template for more information
using LibraryManagement;

Book book1 = new Book(101, "Tholkappiyam", "JayyaKKavin", true);
Book book2 = new Book(102, "Thirukural", "Ramkumar", true);
```

```csharp
Book book3 = new Book(103, "Puranooru", "Parithi", true);
Book book4 = new Book(104, "HahaHoHo", "Sanjai Bro", false);
Library.book.Add(book1);
Library.book.Add(book2);
Library.book.Add(book3);
Library.book.Add(book4);

while (true)
{
    Console.WriteLine("Choose the option\n1.Borrow Book\n2.Return
Book\n3.Display Books\n4.Exit");
    int choice = Convert.ToInt32(Console.ReadLine());
    if (choice == 1)
    {
        Console.WriteLine("Enter the title of the book to borrow");
        string? title = Console.ReadLine();
        Library.BorrowBook(title);
    }
    else if (choice == 2)
    {
        Console.WriteLine("Enter the title of the book to return");
        string? title = Console.ReadLine();
        Library.ReturnBook(title);
    }
    else if (choice == 3)
    {
        Library.DisplayBookDetails();
    }

    else if (choice == 4)
    {
        break;
    }
}
```

Output: