LAB-3

Create a class Book which contains four members: name, author, price, num_pages. Include a constructor to set the values for the members. Include methods to set and get the details of the objects. Include a toString( ) method that could display the complete details of the book. Develop a Java program to create n book objects.

SOLUTION :

```java
import java.util.*;
import java.lang.*;
class Book {
        String name, author;
        double price;
        int num_pages;
        Scanner in = new Scanner(System.in);

        Book() {
                System.out.println("Enter name of book: ");
                name = in.nextLine();

                System.out.println("Enter name of author: ");
                author = in.nextLine();

                System.out.println("Enter price of book in Rs: ");
                price = in.nextDouble();
```

```java
        System.out.println("Enter number of pages in the book: ");
        num_pages = in.nextInt();
    }


    void show() {
        System.out.println("Name: " + name);
        System.out.println("Author: " + author);
        System.out.println("Price: " + price);
        System.out.println("Number of pages: " + num_pages);
    }


    public String toString() {
        return name + ", By " + author + " for Rs." + price + " and has " +
num_pages + " pages";
    }


    public static void main(String[] args) {

        Scanner in = new Scanner(System.in);

        int n, x;

        System.out.println("Enter number of books to be created: ");
        n = in.nextInt();
```

```java
        Book B[] = new Book[n];


        for(int i = 0; i < n; i++) {

                System.out.println("Book " + (i+1));

                B[i] = new Book();

                System.out.println();

        }


        for(int i = 0; i < n; i++) {

                System.out.println("Book " + (i+1));

                System.out.println(B[i]);

                System.out.println();

        }
        do {

                System.out.println("Enter the book number whose details
you want to display: ");

                x = in.nextInt();

        } while(x < 1 && x > n);

        B[x-1].show();


    }
}
```

OUTPUT:

```
C:\Users\dell\OneDrive\Desktop\java>javac Book.java

C:\Users\dell\OneDrive\Desktop\java>java Book
Enter number of books to be created:
2
Book 1
Enter name of book:
2 States
Enter name of author:
Chetan Bhagat
Enter price of book in Rs:
299
Enter number of pages in the book:
556

Book 2
Enter name of book:
The Boy who loved
Enter name of author:
Durjoy Datta
Enter price of book in Rs:
499
Enter number of pages in the book:
823

Book 1
2 States, By Chetan Bhagat for Rs.299.0 and has 556 pages

Book 2
The Boy who loved, By Durjoy Datta  for Rs.499.0 and has 823 pages

Enter the book number whose details you want to display:
1
Name: 2 States
Author: Chetan Bhagat
Price: 299.0
Number of pages: 556

C:\Users\dell\OneDrive\Desktop\java>
```