LAB program 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.

CODE:

```
import java.util.Scanner;

class Book {

    private String name;
    private String author;
    private double price;
    private int num_pages;

    public Book(String name, String author, double price, int num_pages) {
        this.name = name;
        this.author = author;
        this.price = price;
        this.num_pages = num_pages;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public double getPrice() {
```

```
        return price;
    }

    public void setPrice(double price) {
        this.price = price;
    }

    public int getNumPages() {
        return num_pages;
    }

    public void setNumPages(int num_pages) {
        this.num_pages = num_pages;
    }

    @Override
    public String toString() {
        return "Book Name: " + name + "\nAuthor: " + author + "\nPrice:
        " + price + "\nNumber of Pages: " + num_pages;
    }
}

public class third {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the number of books: ");
        int n = sc.nextInt();
        sc.nextLine();

        Book[] books = new Book[n];

        for (int i = 0; i < n; i++) {
            System.out.println("\nEnter details of book " + (i + 1) + ":");

            System.out.print("Enter book name: ");
            String name = sc.nextLine();

            System.out.print("Enter author name: ");
            String author = sc.nextLine();

            System.out.print("Enter price: ");
            double price = sc.nextDouble();

            System.out.print("Enter number of pages: ");
```

```
            int num_pages = sc.nextInt();
            sc.nextLine();

            books[i] = new Book(name, author, price, num_pages);
        }

        System.out.println("\n--- Book Details ---");
        for (int i = 0; i < n; i++) {
            System.out.println("\nDetails of book " + (i + 1) + ":");
            System.out.println(books[i].toString());
        }

        sc.close();
    }
}
```

OUTPUT:

```
Enter the number of books:
2

Enter details of book 1:
Enter book name: Alchemist
Enter author name: paulo Coelho
Enter price: 289
Enter number of pages: 100

Enter details of book 2:
Enter book name: A Good Girl's Guide to Murder
Enter author name: Holly Jackson
Enter price: 350
Enter number of pages: 300

--- Book Details ---

Details of book 1:
Book Name: Alchemist
Author: paulo Coelho
Price: 289.0
Number of Pages: 100

Details of book 2:
Book Name: A Good Girl's Guide to Murder
```

```
Author: Holly Jackson
Price: 350.0
Number of Pages: 300
PS E:\java lab>
```

OBSERVATION:

Lab program 3] → Q] create a class Book which contains four memb. name, author, price, num_pages. Include constructor. Include methods to set and get the details of the objects. Include toString() method that could display the complete details of the book. Develop for n objects.

```
Import java.util.Scanner;

class Book {
    private String name;
    private String author;
    private double price;
    private int num_pages;

    public Book (String name, String author,
      double price, int num_pages) {
        this.name = name;
        this.author = author;
        this.price = price;
        this.num_pages = num_pages;

    public String getName () {
        return name;
    }
    public void setName (String name) {
        this.name = name;
    }
    Public String getAuthor () {
        return author;
    }
    public void setAuthor (String author) {
        this.author = author;
    }
    public double getprice () {
        return price;
    }
```

```
    public void setPrice(double price){
        this.price = price;
    }
    public int getNumPages(){
        return num_pages;
    }
    public void setNumPages(int num_pages){
        this.num_pages = num_pages;
    }
    public String toString(){
        return "Book Name: " + name +
               "\nAuthor: " + author +
               "\nPrice: ₹" + price +
               "\nNumber of Pages: " + num_pages;
    }
}

Public class Main{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number
        of books: ");
        int n = sc.nextInt();
        sc.nextLine();

        Book[] books = new Book[n];
```

Enter number of pages: 1000
Enter details of book 2
Enter book name:
B
Enter Author name:
abc
Enter book price:
50
Enter number of pages: 500

book details:
Book name: A author: xyz price: 234
number of pages: 1000
Book name: B author: abc book price: 50
number of pages: 500.

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