Lab Program

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

```java
1  package Book;
2
3  //Class Book
4  class Book {
5    private String name;
6    private String author;
7    private double price;
8    private int num_pages;
9
10   // Constructor
11   public Book(String name, String author, double price, int num_pages) {
12       this.name = name;
13       this.author = author;
14       this.price = price;
15       this.num_pages = num_pages;
16   }
17
18   // Setter methods
19   public void setName(String name) {
20       this.name = name;
21   }
22
23   public void setAuthor(String author) {
24       this.author = author;
25   }
26
27   public void setPrice(double price) {
28       this.price = price;
29   }
30
31   public void setNumPages(int num_pages) {
32       this.num_pages = num_pages;
33   }
34
35   // Getter methods
36   public String getName() {
37       return name;
38   }
39
40   public String getAuthor() {
41       return author;
42   }
```

```java
33    }
34
35    // Getter methods
36    public String getName() {
37        return name;
38    }
39
40    public String getAuthor() {
41        return author;
42    }
43
44    public double getPrice() {
45        return price;
46    }
47
48    public int getNumPages() {
49        return num_pages;
50    }
51
52    // toString() method to display complete book details
53    public String toString() {
54        return "Book Name: " + name +
55                "\nAuthor: " + author +
56                "\nPrice: " + price +
57                "\nNumber of pages: " + num_pages;
58    }
59 }
60
```

```java
1  package Book;
2
3  //Main class
4  import java.util.Scanner;
5  public class BookDetails {
6  public static void main(String[] args) {
7      Scanner sc = new Scanner(System.in);
8
9      System.out.print("Enter number of books: ");
10     int n = sc.nextInt();
11     sc.nextLine(); // consume newline
12
13     Book[] books = new Book[n];
14
15     for (int i = 0; i < n; i++) {
16         System.out.println("\nEnter details for Book " + (i + 1) + ":");
17
18         System.out.print("Enter Book Name: ");
19         String name = sc.nextLine();
20
21         System.out.print("Enter Author: ");
22         String author = sc.nextLine();
23
24         System.out.print("Enter Price: ");
25         double price = sc.nextDouble();
26
27         System.out.print("Enter Number of Pages: ");
28         int num_pages = sc.nextInt();
29         sc.nextLine(); // consume newline
30
31         books[i] = new Book(name, author, price, num_pages);
32     }
33
34     System.out.println("\n---- Book Details ----");
35     for (int i = 0; i < n; i++) {
36         System.out.println("\nBook " + (i + 1) + ":");
37         System.out.println(books[i].toString());
38     }
39
40     sc.close();
41 }
42 }
```

```
Enter number of books: 1

Enter details for Book 1:
Enter Book Name: java Program
Enter Author: james gosling
Enter Price: 1000
Enter Number of Pages: 650

---- Book Details ----

Book 1:
Book Name: java Program
Author: james gosling
Price: 1000.0
Number of pages: 650
```