

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.

Program:

```
import java.util.Scanner;
```

```
class Book{
```

```
    private String name;
```

```
    private String author;
```

```
    private double price;
```

```
    private int numPages;
```

```
    public Book(String name, String author, double price, int  
numPages) {
```

```
        this.name = name;
```

```
        this.author = author;
```

```
        this.price = price;
```

```
        this.numPages = numPages;
```

```
    }
```

```
    public void setName(String name) {
```

```
        this.name = name;
```

```
}
```

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

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

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

```
public String getName() {  
    return name;  
}
```

```
public String getAuthor() {  
    return author;  
}
```

```
public double getPrice() {  
    return price;  
}
```

```
}
```

```
public int getNumPages() {  
    return numPages;  
}
```

```
@Override
```

```
public String toString() {  
    return "Book Details:\n" +  
        "Name: " + name + '\n' +  
        "Author: " + author + '\n' +  
        "Price: $" + price + '\n' +  
        "Number of Pages: " + numPages;  
}  
}
```

```
public class BookProgram{  
    public static void main(String[] args) {  
        Scanner scanner = new Scanner(System.in);  
  
        System.out.print("Enter the number of books to create: ");  
        int n = scanner.nextInt();  
        scanner.nextLine();
```

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

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

```
    System.out.println("\nEnter details for book " + (i + 1) + ":");
```

```
    System.out.print("Enter name: ");
```

```
    String name = scanner.nextLine();
```

```
    System.out.print("Enter author: ");
```

```
    String author = scanner.nextLine();
```

```
    System.out.print("Enter price: ");
```

```
    double price = scanner.nextDouble();
```

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

```
    int numPages = scanner.nextInt();
```

```
    scanner.nextLine();
```

```
    books[i] = new Book(name, author, price, numPages);
```

```
}
```

```
System.out.println("\nDetails of all books:");
```

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

```

        System.out.println("\nBook " + (i + 1) + ":");
        System.out.println(books[i].toString());
    }

    scanner.close();
}
}

```

```

PS C:\Users\DISHA D S\OneDrive\Desktop\java> cd "c:\Users\DISHA D S\OneDrive\Desktop\java"
ram }
Enter the number of books to create: 2

Enter details for book 1:
Enter name: aaa
Enter author: AAA
Enter price: 599
Enter number of pages: 60

Enter details for book 2:
Enter name: bbb
Enter author: BBB
Enter price: 699
Enter number of pages: 40

Details of all books:

Book 1:
Book Details:
Name: aaa
Author: AAA
Price: $599.0
Number of Pages: 60

Book 2:
Book Details:
Name: bbb
Author: BBB
Price: $699.0
Number of Pages: 40

```

