

Lab Program - 3

Create a class Book which contains four member name, author, price, num-pages. Include a constructor to set the values for the members. Include a toString() method that could display the complete details of the book. Develop a Java Program.

→

```
import java.util.Scanner;
class Book
{
    private String book-name;
    private String author;
    private double price;
    private int no-of-pages;
    Scanner s = new Scanner(System.in);
    public Book() {
        this.book-name = "";
        this.author = "";
        this.price = 0;
        this.no-of-pages = 0;
    }
    void getdetails() {
        System.out.println("Enter book name:");
        book-name = s.nextLine();
    }
}
```

```

System.out.print("Enter author's name:");
author = s.nextLine();
System.out.print("Enter price of book:");
price = s.nextDouble();
System.out.print("Enter the number of pages of Book:");
no-of-pages = s.nextInt();
s.nextLine();

```

```

}
public String toString()
{
return ("---- Book Details ---- \n Book name: " +
book-name + "\n" + "Author: " + author + "\n" +
"Number of pages: " + no-of-pages + "\n" + "----");
}
}

```

```

public class Main {
public static void main (String args[]) {
int n, i=0;

```

```

Scanner sc = new Scanner(System.in);

```

```

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

```



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

~~for~~

```
for (i = 0; i < n; i++) {  
    System.out.println("Enter the details of  
    Book " + (i + 1));
```

```
    b[i] = new Book();  
    b[i].getDetails();  
}
```

```
for (i = 0; i < n; i++) {  
    System.out.println(b[i]);  
}
```

O/P

Enter the number of books: 2

Enter the details of book 1 Enter book name: a

Enter author's name: a

Enter price of book: 50

Enter the number of pages: 50

Enter the details of book 2 Enter book name: b

Enter author's name: b

Enter price of book: 80

Enter the number of pages: 60

- - - - - BOOK DETAILS - - - - -

Book name : a

Author : a

Price : 50.0

Number of Pages : 50

- - - - - BOOK DETAILS - - - - -

Book name : b

Author : b

Price : 60.0

Number of pages : 60

Main - Notepad

```
File Edit Format View Help
import java.util.Scanner;

class Book
{
    private String book_name;
    private String author;
    private double price;
    private int no_of_pages;
    Scanner s = new Scanner(System.in);

    public Book() {
        this.book_name = "";
        this.author = "";
        this.price = 0;
        this.no_of_pages = 0;
    }

    void getdetails(){
        System.out.print("Enter book name:");
        book_name = s.nextLine();
        System.out.print("Enter author's name:");
        author = s.nextLine();
        System.out.print("Enter price of book:");
        price = s.nextDouble();
        System.out.print("Enter the number of pages of book:");
        no_of_pages = s.nextInt();
        s.nextLine();
    }

    public String toString()
    {
        return ("-----BOOK DETAILS-----\nBook name:"+ book_name +"\n"+"Author:"+author+"\n"+ "Price:"+price+"\n"+ "Number of Pages:"+no_of_pages+"\n"+
    }
}
```

01:57 PM
16-10-2020

```
Main - Notepad
File Edit Format View Help

    System.out.print("Enter price of book:");
    price = s.nextDouble();
    System.out.print("Enter the number of pages of book:");
    no_of_pages = s.nextInt();
    s.nextLine();
}

public String toString()
{
    return ("-----BOOK DETAILS-----\nBook name:" + book_name + "\n" + "Author:" + author + "\n" + "Price:" + price + "\n" + "Number of Pages:" + no_of_pages + "\n" +
}

}

public class Main {
    public static void main(String args[]) {
        int n,i=0;

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the number of books:");
        n = sc.nextInt();
        sc.nextLine();
        Book [] b = new Book[n];
        for( i=0;i<n;i++) {
            System.out.print("Enter the details of book " + (i+1));
            b[i] = new Book();
            b[i].getdetails();
        }
        for(i=0;i<n;i++) {
            System.out.println(b[i]);
        }
    }
}

< >
```


The screenshot shows a Windows desktop environment. On the left, a Command Prompt window titled "C:\Windows\system32\cmd.exe" displays the execution of a Java program. The user enters the following commands and receives the corresponding output:

```
C:\Users\LENOVO\Desktop\java>javac Main.java
C:\Users\LENOVO\Desktop\java>java Main
Enter the number of books:3
Enter the details of book 1Enter book name:a
Enter author's name:a
Enter price of book:50
Enter the number of pages of book:50
Enter the details of book 2Enter book name:b
Enter author's name:b
Enter price of book:60
Enter the number of pages of book:60
Enter the details of book 3Enter book name:c
Enter author's name:c
Enter price of book:70
Enter the number of pages of book:70
-----BOOK DETAILS-----
Book name:a
Author:a
Price:50.0
Number of Pages:50
-----BOOK DETAILS-----
Book name:b
Author:b
Price:60.0
Number of Pages:60
-----BOOK DETAILS-----
Book name:c
Author:c
Price:70.0
Number of Pages:70
-----
C:\Users\LENOVO\Desktop\java>
```

On the right, a Notepad window displays the output of the Java program, which is a formatted string with line breaks:

```
\n"+"Author:"+author+"\n" "Price:"+price+"\n" "Number of Pages:"+no_of_pages+"\n"+
```

The Windows taskbar at the bottom shows the Start button and icons for various applications, including File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and the Command Prompt. The system clock in the bottom right corner indicates the time is 01:56 PM on 16-10-2020.