

26/12/23

Lab Program - 3

- Q. 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.

```
import java.util.Scanner;  
class Book{
```

```
    String name;  
    String author;  
    int price;  
    int numPages;
```

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

```
    public String toString() {
```

```
        String name = "Book name:" + this.name + "\n";  
        String author = "Author name:" + this.author + "\n";  
        String price = "Price:" + this.price + "\n";  
        String numPages = "Number of pages:" + this.numPages +  
                           "\n";
```

```
        return name + author + price + numPages;  
    }
```

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

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

```
        for (int i = 0; i < n; i++) {  
            System.out.print("Enter name of the book:");  
            String name = s.next();  
            System.out.print("Enter author of the book:");  
            String author = s.next();  
            System.out.print("Enter the price of the book:");  
            int price = s.nextInt();  
            System.out.print("Enter the number of pages of  
                the book:");  
            int numpages = s.nextInt();  
            b[i] = new Book(name, author, price, numpages);
```

```
        }  
        System.out.println("\nBook Details:");  
        for (int i = 0; i < n; i++) {  
            System.out.println("Book " + (i+1) + ": " + b[i]);
```

```
        }  
    }  
}
```


Output -

Enter the number of books: 2

Enter name of the ~~book~~ book: Java

Enter ^{price} ~~author~~ of the book: 250

Enter the number of pages of the book: 100

Enter name of the book: DBMS

Enter author of the book: George

Enter the price of the book: 300

Enter the number of pages of the book: 150

Book details:

Book 1:

Book name: Java

Author name: John

Price: 250

Number of page: 100

Book 2:

Book name: DBMS

Author name: George

Price: 300

Number of pages: 150

SHREYA SONI

1BM22CS268

26/12/23

10