

### Lab Program 3:

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 and 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 {
```

```
    private String name, author;
```

```
    private double price;
```

```
    private int num_pages;
```

```
    Book() {
```

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

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

```
        this.price = 0.0;
```

```
        this.num_pages = 0;
```

```
    }
```

```
    Book (String n, String a, double p, int np)
```

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

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

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

```
        this.num_pages = np;
```

```
    }
```

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

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

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

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

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

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

```
public String getPrice () {  
    return this.price;  
}
```

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



```
public String toString() {  
    return ("Details:\n" + "Name of the  
        book:" + this.name + "\n Name  
        of the author:" + this.author  
        + "\n Price of the book:" +  
        this.price + "\n Number of  
        pages:" + this.num-pages);  
}  
}
```

```
class BookMain {
```

```
    public static void main (String[] args) {  
        int n;  
        System.out.print("Enter the number  
            of books\t");  
        Scanner in = new Scanner(System.in);  
        n = in.nextInt();  
        Book[] b = new Book[n];  
  
        for (int i = 0; i < n; i++) {
```

```
            b[i] = new Book();
```

```
            Scanner input = new Scanner(System.in);
```

```
            System.out.println("Enter the name  
                of the book");
```

```
            b[i].setName(input.nextLine());
```

```
            System.out.println("Enter the  
                name of the author of the book");
```

```
            b[i].setAuthor(input.nextLine());
```

```
            System.out.println("Enter the price  
                of the book");
```

```
b[i].setPrice(input.nextDouble());  
System.out.println("Enter the number  
of pages of the book");  
b[i].setNumPages(input.nextInt());  
}
```

```
for (int j=0; j<n; j++){  
    System.out.println("The details of the  
book " + (j+1) + " are as follows:");  
    System.out.println(b[j].toString());  
}  
}
```