

WEEK 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.

Source Code:

```
import java.util.Scanner;
class Book {    int
price;    String author;
String name;    int
pages;
    public Book(int price, String author, String name, int pages) {        this.price = price;
this.author = author;        this.name = name;        this.pages = pages;
    }
    public void setter() {
        System.out.println("enter the price,author,name and pages of the book");        Scanner sc = new
Scanner(System.in);        this.price=sc.nextInt();        this.author= sc.next();        this.name=sc.next();
this.pages=sc.nextInt();
    }
    public void getter() {
        System.out.println("Book Details:");
        System.out.println("Price:"+price);
        System.out.println("Author:"+author);
        System.out.println("Name:"+name);
        System.out.println("Pages:"+pages);
    }    public String toString() {        return "these are book
details";
    }
}
```

```

public class Pro {
    public static void main(String[] args) {
        Scanner s1 = new
Scanner(System.in);
        System.out.println("enter the number of books");
        int n = s1.nextInt();

        Book []b1 = new Book[n];
        for(int i=0;i<n;i++){
            b1[i] = new Book(200,"sachin","The
Pride",111);
            b1[i].getter();
            b1[i].setter();
            b1[i].getter();
            System.out.println(b1[i]);

        }
    }
}

```

OUTPUT:

```

enter the number of books
1
Book Details:
Price:200
Author:sachin
Name:The Pride
Pages:111
enter the price,author,name and pages of the book
150
virat
TheCentury
120
Book Details:
Price:150
Author:virat
Name:TheCentury
Pages:120
these are book details

```

OBSERVATION:

Prgm 3

19/10/24

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 object. Include a toString() method that could display the complete details of the book.

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

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

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

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

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

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

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

```
String getName() {  
    return Name;  
}
```

```
String getAuthor() {  
    return Author;  
}
```

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

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

```
Public String toString() {  
    return "Books { " +  
        "Name = " + name + " | " +  
        "Author = " + author + " | " +  
        "Price = " + price + " | " +  
        "Number of pages = " + numPages  
    }  
}
```



```

class BookStore {
    public static void main (String [] args) {
        Scanner sc = new Scanner (System.in);
        List <Book> books = new ArrayList <> ();
        System.out.println ("Enter the no of books : ");
        int n = sc.nextInt ();
        sc.nextLine ();
    }

```

```

    for (int i = 0; i < n; i++) {
        System.out.println ("Enter details for book " + (i+1) + ":");
        System.out.println ("Name : ");
        String name = sc.nextLine ();
        System.out.println ("Author : ");
        String author = sc.nextLine ();
        System.out.println ("Price : ");
        double price = sc.nextDouble ();
        System.out.println ("Number of pages : ");
        int numPages = sc.nextInt ();
        sc.nextLine ();
    }

```

```

        Book book = new Book (name, author, price,
                                numPages);
        books.add (book);
    }

```

```

    System.out.println ("\n Book Details : ");
    for (Book book : books) {
        System.out.println (book);
    }

```

```

    sc.close ();
}

```

```

}

```

Enter the number of books : 2

Enter details for book 1:

Name : No time for goodbye

Author : Lindwood Barclay

Price : 450

No of Pages : 290

Enter details for book 2:

Name : Holes

Author : Louis Sachar

Price : 200

No of Pages : 250

Book Details :

Book 1 Name = "No time for goodbye", Author =
"Lindwood Barclay", Price = 450.0,
No of pages = 290 }

Book 2 Name = "Holes", Author = "Louis Sachar",
Price = 200.0, No of Pages = 250 }

✓
N
✓

