

12/1/24

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.

Code:-

```

import java.util.Scanner;

class Book {
    String name;
    String author;
    double price;
    int num-pages;

    Book (String name, String author, double price, int num-pages) {
        this.name = name;
        this.author = author;
        this.price = price;
        this.num-pages = num-pages;
    }

    void setDetails (String name, String author, double price, int num-pages) {
        this.name = name;
        this.author = author;
        this.price = price;
        this.num-pages = num-pages;
    }

    void getDetails () {
        String S = "Book : " + name + " by author : " + author +
            " with pages : " + num-pages + " is of price : " + price;
        System.out.println(S);
    }

    public String toString () {
        String S = "Book : " + name + " by author : " + author +
            " with pages : " + num-pages + " is of price : " + price;
        System.out.println(S);
        return (S);
    }
}

```


Public class Main {

Public static void main (String[] args) {

Scanner scanner = new Scanner (System.in);

System.out.print ("Enter the number of books :");

int n = scanner.nextInt();

Book[] books = new Book[n];

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

~~scanner.nextLine();~~

System.out.println ("Enter details for Book " + (i+1) + ":");

System.out.print ("Name: ");

String name = scanner.nextLine();

System.out.print ("Author: ");

String author = scanner.nextLine();

System.out.print ("Price: ");

double price = scanner.nextDouble();

System.out.print ("Number of Pages: ");

int numPages = scanner.nextInt();

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

}

System.out.println ("Details of the Books:");

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

System.out.print ("Book " + (i+1) + ": ");

testString();

}

scanner.close();

}

}

Output:

Enter the number of books to create: 2

Enter details for book 1:

Name: Ikigai

Author: John

Price: 200

Number of Pages: 100

Enter details for book 2:

Name: Friends

Author: Petter

Price: 300

Number of Pages: 100

Details of the Books:

Book 1:

Book: Ikigai by author: John with pages: 100 is of price: 200.0

Book 2:

Book: Friends by author: Petter with Pages: 100 is of Price: 300.0