Lab-3

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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;

    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 nameStr = "Book Name :" + this.name + "\n";
        String authorStr = "Author Name :" + this.author + "\n";
        String priceStr = "Price :" + this.price + "\n";
        String numPagesStr = "Number of pages :" + this.numPages
                             + "\n";
        return nameStr + authorStr + priceStr + numPagesStr;
    }
}
```

// Arrays are always declared as
// Book[] books =
// class [] obj =

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```
public class Main {
    public static void main(String[] args)
    { Scanner s= new Scanner(System.in);

    int n = s.nextInt();

    Book[] books = new Book[n];

    for(int i=0; i<n ;i++)
    {
        System.out.println("Enter details for book" +(i+1));
        System.out.println(" Enter Name: ");
        String name = s.nextLine();
        System.out.println("Enter author :");
        String author = s.nextLine();

        System.out.println("Enter price :");
        int price = s.nextInt();
        System.out.println("Enter number of pages:");
        int numPages = s.nextInt();

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

    System.out.println("\nDetails of the books: ");
    for(int i=0;i<n;i++)
    { System.out.println("Book " +(i+1)+ ":\n"+ books[i]);
    }
}
```

// Arrays are always declared as
// int[] // Book[] books =
// class[] obj =

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```
public class Main {
    public static void main(String[] args)
{   Scanner s = new Scanner(System.in);

    int n = s.nextInt();

    Book[] books = new Book[n];

for(int i=0; i<n; i++)
{
    System.out.println("Enter details for book" + (i+1));
    System.out.println("Enter Name: ");
    String name = s.nextLine();
    System.out.println("Enter author: ");
    String author = s.nextLine();

    System.out.println("Enter price: ");
    int price = s.nextInt();
    System.out.println("Enter number of pages:");
     int numPages = s.nextInt();

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

System.out.println("\nDetails of the books: ");
    for(int i=0; i<n; i++)
    { System.out.println("Book " + (i+1) + ":\n" + books[i]);
    }
}
```

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Output: 2

Enter details for book 1
Enter Name: Diary of Wimpy kid
Enter Author: Jeff
Enter number of pages: 200

Enter details for book 2
Enter Name: Ugly ~~Lover~~ Love
Enter author: Coolen Hoover
Enter number of pages: 300

Details of the books:
Book 1:
Book Name: Diary of Wimpy kid
Author Name: Jeff
Price: 250
Number of Pages: 200

Book 2:
Book Name: Ugly Love
Author Name: Coolen Hoover
Price: 500
Number of Pages: 300

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