

3] Book Database

Create a class Book that contains four members: name, author, price, and num-pages. Includes a constructor to set the values for the members. Include method to set and get the details of the book objects. Include a toString() method that would display the complete details of 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() {}
```

```
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, author, price, numpages;
```

```
    name = "Book name: " + this.name + "\n";
```

```
    author = "Author name: " + this.author + "\n";
```

```
    price = "Price: " + this.price
```

```
    numpages = "number of pages: " + this.numpages + "\n";
```

```
    return name + author + price + numpages;
```

```
}
```

```
}
```

class Main

{
public static void main (String args [])

{
Scanner s = new Scanner (System.in);
int n;
String name;
String author;
int price;
int numpages;
System.out.println ("Enter number of books");
n = s.nextInt();

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

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

{
System.out.println ("Books" + (i+1) + ":");
System.out.println ("Enter name of book:");
name = s.next();
System.out.println ("Enter author:");
author = s.next();
System.out.println ("Enter price:");
price = s.nextInt();
System.out.println ("Enter no of pages:");
numpages = s.nextInt();
b[i] = new Book (name, author, price, numpages);

}

Output :

Enter the number of books : 1

Book 1:

Enter the name of book : Harry Potter

Enter the author of the book : J K Rowling

Enter the price of book : 1000

Enter the number of pages of books : 600

Book 1: ~~Harry Potter~~

name : Harry Potter

Author : J K Rowling

Price : 1000

~~Number of pages : 600~~

BOOK DETAILS

```
import java.util.Scanner;
class Book{
    private String name;
    private String author;
    private double price;
    private 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;
    }

    public void setName(String name){
        this.name=name;
    }
    public void setAuthor(String author){
        this.author=author;
    }
    public void srtPrice(double price){
        this.price=price;
    }
    public void setNum_Pages(int num_pages){
        this.num_pages=num_pages;
    }

    public String getName(){
        return name;
    }
    public String getAuthor(){
        return author;
    }
    public double getPrice(){
        return price;
    }
    public int getNum_Pages(){
        return num_pages;
    }

    @Override
    public String toString(){
        return "Book Details:\n" +
            "Name: " + name + "\n" +
            "Author: " + author + "\n" +
```

BOOK DETAILS

```
        "Price: " + price + "\n" +
        "Number Of pages:: "+ num_pages;
    }

}

public class BookDetails {
    public static void main( String argra[]){
        int n;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter number of books:");
        n=sc.nextInt();
        Book [] books=new Book[n];
        for(int i=0;i<n;i++){
            System.out.println("Enter details of book "+(i+1) +":");
            System.out.println("Name:");
            String name=sc.next();
            System.out.println("Author:");
            String author=sc.next();
            System.out.println("Price:");
            double price=sc.nextDouble();
            System.out.println("Number of pages:");
            int num_pages=sc.nextInt();
            books[i]=new Book(name,author,price,num_pages);

        }

        for(Book b:books){
            System.out.println(b);    //
System.out.println(b.toString());
        }

    }
}
```

OUTPUT :

```
Enter number of books:
2
Enter details of book 1:
Name:
```

BOOK DETAILS

Harry Potter

Author:

Rowling

Price:

250

Number of pages:

500

Enter details of book 2:

Name:

Two Cities

Author:

Charle

Price:

100

Number of pages:

250

Book Details:

Name: Harry Potter

Author: Rowling

Price: 250.0

Number Of pages: 500

Book Details:

Name: Two Cities

Author: Charle

Price: 100.0

Number Of pages: 250