

15/10/24

1. Create a class Book which contains four members: name, author, price, numPages. Include a constructor to set the value for the members. Include methods to set and get the details of the objects. Include a toString() method that displays the complete details of the book. Develop a Java program to create 'n' objects.

Program:

```
import java.util.Scanner
```

```
class Book
```

```
{
```

```
    private String name;
```

```
    private String Author;
```

```
    private double price;
```

```
    private int numPages;
```

```
    public Book (String name, String author, double  
                price, int numPages)
```

```
{
```

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

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

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

```
        this.numPages = numPages;
```

```
}
```

```
public String  
    ^  
    getName ()  
{
```

```
    return name;  
}
```

```
public String getAuthor ()  
{
```

```
    return author;  
}
```

```
public double getPrice ()  
{
```

```
    return price;  
}
```

```
public int getnumPages ()  
{
```

```
    return numPages;  
}
```

```
public void setName (String name)  
{
```

```
    this.name = name;  
}
```

```
public void setAuthor (String author)  
{
```

```
    this.author = author;  
}
```

```
public void setPrice (double price)  
{
```

```
    this.price = price;  
}
```



```
public void setNumPages (int numPages)
{
```

```
    this.numPages = numPages;
}
```

```
public String toString ()
{
```

```
    return "Book Details : \n" + "Name : "
        + name + "\n" + "Author : " + author + "\n"
        + "Price : " + price + "\n" + "Number of pages : "
        + numPages + "\n";
}
```

```
}
```

```
public class Main
```

```
{
```

```
    public static void Main (String[] args)
    {
```

```
        Scanner sc = new Scanner (System.in);
        System.out.println("Enter the number of books :");
        int n = sc.nextInt();
```

```
        sc.nextLine();
```

```
        Book[] books = new Book[n];
```

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

```
            System.out.println("Book Details:");
```

```
            System.out.println("Book Name : ");
```

```
            stringname = sc.nextLine();
```

```
System.out.println(" Author's name : ");
String author = sc.nextLine();
System.out.println(" Book's price : ");
double price = sc.nextDouble();
System.out.println(" Number of pages : ");
int numPages = sc.nextInt();
Books[i] = new Book(name, author, price, numPages);
}
System.out.println(" Details of all books : ");
for (Book book : books)
{
    System.out.println(book);
}
}
```

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Solve

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C:\Users\Admin\Downloads>javac Main.java

C:\Users\Admin\Downloads>java Main
Enter the number of books: 2

Enter details for book 1:
Enter book name: black beauty
Enter author name: richard
Enter price: 350
Enter number of pages: 300

Enter details for book 2:
Enter book name: harry potter
Enter author name: sam
Enter price: 450
Enter number of pages: 400

Details of all books:
Dharunya -1BM23CS090 Book Name: black beauty
Author: richard
Price:350.0
Number of Pages: 300
Dharunya -1BM23CS090 Book Name: harry potter
Author: sam
Price:450.0
Number of Pages: 400

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