

Create a class Book which contains four members: name, author, price, numPages. 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 Books:
```

```
    String name;  
    String author;  
    int price;  
    int numPages;  
    Books(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 + "\n";  
numPages = "Number of pages:" + this.numPages  
+ "\n";
```

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```
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();
```

```
Books b [] ;
```

```
b = new Books [n];
```

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

```
System.out.println ("Enter the name of the book");
```

```
name = s.next();
```

```
System.out.println ("Enter the author of the book");
```

```
author = s.next();
```

```
System.out.print ("Enter the price of the book");
```

```
price = s.nextInt();
```

```
System.out.println ("Enter the number of pages of the book");
```

```
numPages = s.nextInt();
```

```
b[i] = new Books (name, author, price,
```

```
numPages);
```

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

```
    System.out.println(b[i]);
```

Output:

Name : Rani Aishwarya

USN : JBM22CS217

Enter the number of books

2

Enter the name of the book

richard

Enter the author of the book

vijay

Enter the price of the book

539

Enter the number of pages of the book

18

Enter the name of the book

Anna

Enter the author of the book

mani kanth

Enter the number of pages of the book

390

Enter the number of pages of the book

140

Book name : richard

Author name : vijay

Price : 539

Number of pages : 180

Book name : amma  
Author name : manikanth  
price : 390  
Number of pages : 140.

→ Additional problems:

```
import java.util.Scanner;  
class Test
```

```
{  
    int a, b;  
    Test(int i, int j){  
        a = i; b = j;  
    }  
    boolean equals(Test o){  
        if(o.a == a && o.b == b) return true;  
        else return false;  
    }  
}  
class PassObj
```

```
{  
    public static void main(String args[]){  
        Test ob1 = new Test(100, 22);  
        Test ob2 = new Test(100, 22);  
        Test ob3 = new Test(-1, -1);  
        System.out.println("ob1 == ob2: " + ob1.equals(ob2));  
        System.out.println("ob1 == ob3: " + ob1.equals(ob3));  
    }  
}
```

outputs

ob1 == ob2 : true  
ob1 == ob3 : false.