

26/12/2023

RA26-12-23

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## Lab - 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 object books.

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

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

```
        String price = "Price : " + this.price + "\n";
```

```
        String 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);

        System.out.print("Enter the number of books:");
        int n = s.nextInt();

        Book b[] = new Book[n];
        for (int i = 0; i < n; i++)
        {
            System.out.print("Enter name of the book: ");
            String name = s.next();
            System.out.print("Enter the author of the book: ");
            String author = s.next();
            System.out.print("Enter the price of the book: ");
            int price = s.nextInt();
            System.out.print("Enter the number of pages of the book: ");

            int numPages = s.nextInt();
            b[i] = new Book(name, author, price, numPages);
        }

        System.out.println("\nBook Details:");
        for (int i = 0; i < n; i++)
        {
            System.out.println("Book " + (i+1) + ": " + b[i]);
        }
    }
}

```

Output: Enter the number of book : 2  
 Enter the name of the book: Java  
 Enter author of the book : George  
 Enter the price of the book : 280  
 Enter the number of pages of the book: 120  
 Enter name of the book: Computer Organization  
 Enter author of the book: Carl Hamacher  
 Enter the price of the book: 400  
 Enter the number of pages of the book: 150

### Book Details :

#### Book 1 :

Book name: Java  
 Author name: George  
 Price : 280  
 Number of pages: 120

#### Book 2:

Book name: Computer Organization  
 Author name: Carl Hamacher  
 Price: 400  
 Number of pages: 150