// Array of objects

Algorithm:

Step 1:
Create 'Books' class with specified instance variables. & include constructor method $Book()\{\}$

Step 2:
Input $n \rightarrow$ number of books.
& create object $b1$ of Book class
Book $b1$ = new Book();

Step 3:
create array of objects of Book class
Book [] arr = new Book();

Step 4:
Intialize each array element as an object & call getDetails method
arr [i] = new Book();
arr [i] = getDetails();

Step 5:
Print details of books by using toString() method.

```java
// Syntax:

import java.util.*;

class Book {
    String name;
    String author;
    double price;
    int num_pages;

    Book(){}

    public String toString(){
        return ("name :" + name + "author :" + author + "pric:"
            + price + "no. of pages :" + num_pages);
    }

    void getDetails(){
        Scanner in = new Scanner(System.in);
        System.out.println("Enter the name of book :");
        name = in.next();
        System.out.println("Enter the price of book :\n");
        price = in.nextDouble();
        System.out.println("Enter name of author :\n");
        author = in.next();
        System.out.println("Enter no. of pages :");
        num_pages = in.nextInt();
    }
}
```

```java
class BookArrayObj {
    public static void main (String args[])
        int n;
        String name;
        String author;

        Scanner in = new Scanner (System.in);
        System.out.println("enter the no. of books");
        n = in.nextInt();
        Book b1 = new Book();

        Book [] arr = new Book[n];
        for (int i=0 ; i<n; i++) {
            arr[i] = new Book();
            arr[i].getDetails();
        }

        System.out.println("The Details of books");
        for (int i=0 ; i<n ; i++) {
            System.out.println(arr[i]);
        }
    }
}
```

```
C:\Users\praji\Desktop\java>java BookArrayObj
Enter the number of books:

2
Enter the name of   book:

atals
Enter the name of author:

ayn
Enter the price of book:

400.4576
Enter the number of pages of book:

450
Enter the name of   book:

name
Enter the name of author:

marcus
Enter the price of book:

45.0
Enter the number of pages of book:

760
The Details of the  books  are  :

 name : atals |  author : ayn | price : 400.4576 | number of pages : 450

 name : name |  author : marcus | price : 45.0 | number of pages : 760
```