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LAB PROGRAM-3
BOOK OBJECTS

Create a class Book that contains four members: name, author, price, and num-pages. Include a constructor to set the values for the members. Include methods to set and get the details of objects. Include a toString() method that could display the complete details of the Book.
Develop a java program to create n book objects

A. PROGRAM:

```
import java.util.Scanner;

class Books
{
    String name, author;
    int price, num-pages;

    Books(String name, String author, int price, int num-pages)
    {
        this.name = name;
        this.author = author;
        this.price = price;
        this.num-pages = num-pages;
    }

    Scanner input = new Scanner(System.in);

    Books()  // Default constructor
    { }
```

```
void accept()
{
  System.out.print("Enter name of book : ");
  name = input.nextLine();
  System.out.print("Enter name of author : ");
  author = input.nextLine();
  System.out.print("Enter price of the book : ");
  price = input.nextInt();
  System.out.print("Enter no. of pages in the book:");
  num_pages = input.nextInt();
  System.out.print("\n");
}

public String toString()
{
  String name, author; int price, num_pages;

  name = "Book name: " + this.name + "\n";
author = "Author name : " + this.author + "\n";
price = "Price : " + this.price + " Rs\n";
num_pages = "Number of pages :" + this.num_pages + "pgs\n";

  return name + author + price + num_pages;
}}
class BookRun
{
  public static void main(String [] args)
  {
    Scanner input = new Scanner(System.in);
    System.out.print("Enter number of books : ");
    int n = input.nextInt();
    System.out.print("\n");
```

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

for(int i=0; i<n; i++)
  { System.out.println("Book " + (i+1) + " :");
    book[i] = new Books();
    book[i].accept();
  }

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

input.close();

}
}
```

OUTPUT :

```
Enter number of books : 2

Book 1 :
Enter name of book : Harry Potter and The Chamber of Secrets
Enter name of author : J.K. Rowling
Enter price of the book : 418
Enter no. of pages in the book : 341

Book 2 :
Enter name of book : Adventures of Vikram Noothan
Enter name of author : Charan G
Enter price of the book : 300
Enter no. of pages in the book : 250
```

Book 1 :
Book name : Harry Potter and The Chamber of Secrets
Author name : J. K. Rowling
Price : 418 Rs
Number of page : 341 pages

Book 2 :
Book name : Adventures of Vibin Nadhan
Author name : Charan G
Price : 300 Rs
Number of pages : 250 pages

```
import java.util.Scanner;

class Books
{
String name,author;
int price,num_pages;
Books(String name,String author,int price,int num_pages)
{
this.name=name;
this.author=author;
this.price=price;
this.num_pages=num_pages;
}

Scanner input=new Scanner(System.in);

Books(){}

void accept()
{
System.out.print("Enter name of book: ");
name=input.nextLine();
System.out.print("Enter name of author: ");
author=input.nextLine();
System.out.print("Enter price of the book: ");
price=input.nextInt();
System.out.print("Enter no. of pages in the book: ");
num_pages=input.nextInt();
System.out.print("\n");
}
```

```
public String toString()
{
String name,author,price,num_pages;
name="Book name: " + this.name + "\n";
author="Author name: " + this.author + "\n";
price="Price: " + this.price + " Rs\n";
num_pages="Number of pages: " + this.num_pages + " pages\n";

return name + author + price + num_pages;
}
}

class BookRun
{
public static void main(String[] args)
{
Scanner input=new Scanner(System.in);

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

Books[] book=new Books[n];

for(int i=0;i<n;i++)
{
System.out.println("Book " + (i+1) + ": ");
book[i]=new Books();
book[i].accept();
}
```

```
for(int i=0;i<n;i++)
{
System.out.println("Book " + (i+1) + ":\n" + book[i] + "\n");
}
input.close();
}
}
```

Output:

```
Enter number of books: 2

Book 1:
Enter name of book: Harry Potter and The Chamber of Secrets
Enter name of author: J. K. Rowling
Enter price of the book: 418
Enter no. of pages in the book: 341

Book 2:
Enter name of book: Adventures of Vibinn Noothan
Enter name of author: Charan G
Enter price of the book: 300
Enter no. of pages in the book: 250

Book 1:
Book name: Harry Potter and The Chamber of Secrets
Author name: J. K. Rowling
Price: 418 Rs
```

Number of pages: 341 pages

Book 2:

Book name: Adventures of Vibinn Noothan

Author name: Charan G

Price: 300 Rs

Number of pages: 250 pages