Date 16/10/2020

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→ 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 & 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.

```java
import java.util.*;
class Book1
{
    String name, author;
    double price;
    int num-pages;

    public Book1()
    {
        this.name="";
        this.author="";
        this.price= 0.0;
        this.num-pages=0;
    }

    public void DETAILS()
    {
        Scanner ob = new Scanner(System.in);
        S.O.pln("ENTER THE NAME OF THE BOOK\n");
        name = ob.nextLine();
        S.O.pln("ENTER THE NAME OF THE AUTHOR");
```

```
author = ob. nextLine();
S.O.pLn ("ENTER THE PRICE OF THE BOOK");
price =ob.nextDouble();
S.O.plnl" ENTER THE NUMBER OF PAGES OF THE BOOK");
num-pages =ob. nextInt();
}

public void ToString()
{
S.o.pLn ("**** DETAILS OF THE BOOK ****");
S.o.pLn ("NAME OF THE BOOK :"+name);
S.o.pLn (" NAME OF THE AUTHOR :"+author);
S.o.pln (" PRICE OF THE BOOK:"+price);
S.o.pln (" NO. OF PAGES OF THE BOOK:"+num-pages);
}

public static void main (String args[])
{

  int i=0,n;
  Book1 obj= new Book1();
  Scanner ob1= new Scanner (System.in);
  S.o.pln (" ENTER THE LIMIT");
  n= ob1. nextInt();
  for (i=1; i<= n; i++)
  {

    obj. DETAILS ();
    obj. ToString ();
  }

 }
}
```

```
author = ob. nextLine();
S.O.pln ("ENTER THE PRICE OF THE BOOK");
price =ob.nextDouble();
S.O.pln(" ENTER THE NUMBER OF PAGES OF THE BOOK");
num-pages =ob. nextInt();
}

public void ToString()
{
S.o.pln ("**** DETAILS  OF THE BOOK ****");
S.o.pln ("NAME OF THE BOOK :"+name);
S.o.pln (" NAME OF THE AUTHOR :"+author);
S.o.pln (" PRICE OF  THE BOOK:"+price);
S.o.pln (" NO. OF PAGES OF THE BOOK :"+num-pages);
}

public static void main (String args[])
{

    int i=0,n;
    Book1 obj= new Book1();
    Scanner ob1= new Scanner (system.in);
    S.o. pln (" ENTER THE LIMIT");
    n= ob1. nextInt();
    for (i=1; i<= n; i++)
    {

        obj. DETAILS();
        obj. ToString();
    }

    }
}
```

ALGORITHN

Step 1 :- Start.

Step 2 :- import java.util.* package & create class Book1.

Step 3 :- Required variables i.e. name, author, price & num-pages is declared.

Step 4 :- Constructor Book1() created to initial the values to the variables.

Step 5 :- method DETAILS() is created in order to enter the details of the book, i.e. name of the book, author, price & no. of pages.

Step 6 :- Another method ToString() is created.

Step 7 :- The method ToString() basically prints all the details of the book.

Step 8 :- Now, main() method is created.

Step 9 :- An object is created obj to call the functions.

Step 10 :- Scanner object ob1 is also created in order to create n book objects.

Step 11 :- A for loop is created for n book objects which calls the methods DETAILS() & ToString().

Step 12 :- The main method() is closed along with the close of Class Book1.

Step 13 :- Stop.

Output :-

ENTER THE LIMIT

3
ENTER THE NAME OF THE AUTHOR BOOK

Computer Applications

ENTER THE NAME OF THE AUTHOR

Sumita Arora

ENTER THE PRICE OF THE BOOK

980
ENTER THE NUMBER OF PAGES OF THE BOOK

1020

**** DETAILS OF THE BOOK ****

NAME OF THE BOOK: Computer Applications
NAME OF THE AUTHOR: Sumita Arora
PRICE OF THE BOOK: 980.0
NO. OF PAGES OF THE BOOK: 1020
ENTER THE NAME OF THE BOOK

Understanding Java

ENTER THE NAME OF THE AUTHOR

Vijay Kumar Pandey

ENTER THE PRICE OF THE BOOK

759.98

ENTER THE NUMBER OF PAGES OF THE BOOK

894

**** DETAILS OF THE BOOK ****
NAME OF THE BOOK: Understanding JAVA
NAME OF THE AUTHOR: Vijay Kumar Pandey
PRICE OF THE BOOK: 759.98
NO. OF PAGES OF THE BOOK: 894

ENTER THE NAME OF THE BOOK
OOJ Concepts
ENTER THE NAME OF THE AUTHOR
Mc-GrawHill
ENTER THE PRICE OF THE BOOK
1345.86
ENTER THE NUMBER OF PAGES OF THE BOOK
2985
**** DETAILS OF THE BOOK ****
NAME OF THE BOOK: OOJ Concepts
NAME OF THE AUTHOR: Mc-GrawHill
PRICE OF THE BOOK: 1345.86
NO. OF PAGES OF THE BOOK: 2985