19/10/2024

Q Create a class Book which contains 4 members : name, author, price, num_pages. Include a Constructor to set values for the members. Include the members to set and get the details of the objects. Include a to String() method that would display the complete details of the book. Develop a Java program to create on book objects.

Ans

```java
import java.util.Scanner;
Class Book{

    private String name;
    private String author;
    private double price;
    private int numPages;

    public book (String name, String author,
    double price, int numpages) {
        this. name = name;
        this.author = author;
        this.price = price;
        this. numPages = numPages;
    }
    public void setName ( String name) {
        this. name = name;
    }
    public void setAuthor ( string author) {
        this.author = author;
    }
    public void setPrice (double price) {
        this.price = price;
    }
```

```java
public void setNumPages (int numPages) {
        this.numPages = numPages;
    }
public String getName() {
        return name;
    }
public String getAuthor() {
        return author;
    }

public String getPrice() {
        return price;
    }

public int getNumPages() {
        return numPages;
    }

public String toString() {

        return "Book Name:" +        name + "\n" + "Author:"
    + author + "\n" + "Price:" + price + "\n" + "Number of
    Pages:" + numPages;
    }
}


public Class Main2 {
        public static void main( String[ ] args) {
        try( Scanner scanner = new scanner (System.in))
            { system.out.println("Enter the no. of books:");
                int n = scanner.nextInt();
                scanner.nextLine();
```

```java
Book[] books = new Book[n];

for(int i=0; i<n; i++){
    System.out.println("\n Enter details for book" + (i+1) + ":");
    System.out.print("Name:");
    String name = Scanner.nextLine();

    System.out.print("Author:");
    String author = Scanner.nextLine();

    System.out.print("Price:");
    double price = Scanner.nextDouble();

    System.out.print("No of Pages:");
    int numPages = Scanner.nextInt();

    Scanner.nextLine();

    books[i] = new Book(name, author, price,
                        numPages);
}

System.out.println("\n Book Details:");
for(Book book : books){
    System.out.println(book);
    System.out.println();
}
}
}
}
```

Output :→ Enter number of books: 3.

Enter details for book 1:
Name : The Alchemist
Author : Sanchit
Price : 7999.99
No. of Pages : 289

Enter details for book 2:
Name : Three men in a Boat
Author : Piyush
Price : 101.99
No. of Pages : 34

Enter details for book 3:
Name : xyz
Author : abc
Price : 171.99
No. of Pages : 91

3 o/p
seq.
N