Lab - (3) - 26/12/2023

Lab Program 3: 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 book objects

Source code:

```
import java.util.Scanner;
class Books
{
    String name;
    String author;
    int price;
    int numPages;
    Books(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, author, price, numPages;
        name = "Book name: " + this.name + "\n";
        author = "Author name: " + this.author + "\n";
        price = "Book Price: " + this.price + "\n";
```

```
        numPages=" Number of Pages: "+this.numPages+"\n";
        return (name+author+price+numPages);
    }
}
class Books_main
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        int n;
        String name;
        String author;
        int price;
        int numPages;
        int i;
        System.out.println("Enter the number of books
        to be entered.");
        n=s.nextInt();
        s.nextLine();
        Books b[]=new Books[n];
        System.out.println("\n");
        for(i=0;i<n;i++)
        {
            System.out.println("Enter the name of the
            book "+(i+1));
            name=s.nextLine();
            System.out.println("Enter the name
            of the author of the book "+(i+1));
            author=s.nextLine();
            System.out.println("Enter the price
            of the book "+(i+1));
            price=s.nextInt();
            s.nextLine();
```

```
System.out.println("Enter the number
of Pages in the Book " + (i+1));
numPages = s.nextInt();
s.nextLine();
b[i] = new Books(name, author, price,
numPages); System.out.println("\n");
System.out.println("\n" + "The book
details are: " + "\n\n");
for(i=0; i<n; i++)
{
    System.out.println
(b[i].toString() + "\n\n");
}
}
}
```

OUTPUT

Enter the number of books to be entered.
3

Enter the name of the book 1
Harmino Station
Enter the name of the author of the book 1
Elizabeth Davis
Enter the price of book 1
300
Enter the number of pages in the book 1
130

Enter the name of the book 2
Pony Station

Enter the name of the author of the book 2
Rick Riordan
Enter the price of the book 2
500
Enter the number of pages in the book 2
300

Enter the name of the book 3
Harry Potter
Enter the name of the author of the book 3
J K Rowling
Enter the price of the book 3
500
Enter the number of page in the book 3
500

The book details are:

Book name: Geronimo Stilton
Author name: Elizabetta Dami
Book Price: 300
Number of Pages: 150

Rm 2/1/2024

Book Name: ~~Harry Potter~~ Percy Jackson
Author name: ~~J K Rowling~~ Rick Riordan
Book Price: 500
Number of page: 300

Book Name: Harry Potter
Author Name: J K Rowling
Book Price: 500
Number of Pages: 500