

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.

CODE:

```
import java.util.Scanner;

class Book {

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

    public Book(String name, String author, double price, int num_pages) {
        this.name = name;
        this.author = author;
        this.price = price;
        this.num_pages = num_pages;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}
```

```

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public double getPrice() {
        return price;
    }

    public void setPrice(double price) {
        this.price = price;
    }

    public int getNumPages() {
        return num_pages;
    }

    public void setNumPages(int num_pages) {
        this.num_pages = num_pages;
    }

    @Override
    public String toString() {
        return "Book Name: " + name + "\nAuthor: " + author + "\n"
            + price + "\nNumber of Pages: " + num_pages;
    }
}

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

        System.out.println("Enter the number of books: ");
    }
}

```

```

int n = sc.nextInt();
sc.nextLine();

Book[] books = new Book[n];

for (int i = 0; i < n; i++) {
    System.out.println("\nEnter details of book " + (i + 1));

    System.out.print("Enter book name: ");
    String name = sc.nextLine();

    System.out.print("Enter author name: ");
    String author = sc.nextLine();

    System.out.print("Enter price: ");
    double price = sc.nextDouble();

    System.out.print("Enter number of pages: ");
    int num_pages = sc.nextInt();
    sc.nextLine();

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

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

sc.close();
}
}

```

OUTPUT:

```
Enter the number of books:
2

Enter details of book 1:
Enter book name: Alchemist
Enter author name: paulo Coelho
Enter price: 289
Enter number of pages: 100

Enter details of book 2:
Enter book name: A Good Girl's Guide to Murder
Enter author name: Holly Jackson
Enter price: 350
Enter number of pages: 300

--- Book Details ---

Details of book 1:
Book Name: Alchemist
Author: paulo Coelho
Price: 289.0
Number of Pages: 100

Details of book 2:
Book Name: A Good Girl's Guide to Murder
Author: Holly Jackson
Price: 350.0
Number of Pages: 300
PS E:\java lab>
```

OBSERVATION:

Lab Program 3] → Q] create a class Book which contains four memb. name, author, price, num pages. Include constructor. Include methods to set and get the details of the objects. Include toString() method that could display the complete details of the book. Develop for no objects.

Import java.util.Scanner;

class Book {

private String name;

private String author;

private double price;

private int num-pages;

public Book (String name, String author,
double price, int num-pages) {

this.name = name;

this.author = author;

this.price = price;

this.num-pages = num-pages;

public String getName () {

return name;

}

public void setName (String name) {

this.name = name;

}

public String getAuthor () {

return author;

}

public void setAuthor (String author) {

this.author = author;

}

public double getPrice () {

return price;

}

```

    public void setPrice (double price) {
        this.price = price;
    }

    public int getNumPages() {
        return num-pages;
    }

    public void setNumPages (int num-pages) {
        this.num-pages = num-pages;
    }

    public String toString () {
        return "Book Name: " + name +
            "\n Author: " + author +
            "\n Price: ₹ " + price +
            "\n Number of pages: " + num-pages;
    }
}

```

```

public class Main {
    public static void main (String[] args) {
        Scanner sc = new Scanner (System.in);
        System.out.println ("Enter the number
            of books: ");
        int n = sc.nextInt();
        sc.nextLine();

        Book[] books = new Book[n];
    }
}

```


Enter number of pages: 1000

Enter details of book 2

Enter book name:

B

Enter Author name:

abc

Enter book price:

50

Enter number of pages: 500

book details:

Book name: A author: xyz price: 234

number of pages: 1000

Book name: B Author: abc book price: 50

number of pages: 500.

Roh

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