

WEEK 3

QUESTION:

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.

INPUT:

```
import java.util.Scanner;

class Book {
    String Name;
    String author;
    int price;
    int num_pages;
    Book(String N, String Au, int P, int Pa) {
        Name = N;
        author = Au;
        price = P;
        num_pages = Pa;
    }
    Book() {
    }
```

```
void setdetails() {  
    Scanner ss = new Scanner(System.in);  
    System.out.println("Enter the book Name: ");  
    Name = ss.nextLine();  
    System.out.println("Enter the Author Name: ");  
    author = ss.nextLine();  
    System.out.println("Enter the Price: ");  
    price = ss.nextInt();  
    System.out.println("Enter the No.Of Pages: ");  
    num_pages = ss.nextInt();  
    System.out.println("DETAILS SET SUCCESFULLY");  
}
```

```
void getdetails() {  
    System.out.println("NAME: " + Name);  
    System.out.println("AUTHOR: " + author);  
    System.out.println("PRICE: " + price);  
    System.out.println("NO.OF PAGES: " + num_pages);  
}
```

```
public String toString() {  
    return ("NAME: " + Name + "\nAUTHOR: " + author +  
        "\nPRICE: " + price + "\nNo.Of Pages: " + num_pages);  
}
```

```

}
class Bookdemo {
    public static void main(String args[]) {
        int n;
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter the no of Books: ");
        n = ss.nextInt();
        Book b1[] = new Book[n];
        for (int i = 0; i < n; i++) {
            System.out.println("ENTER DETAILS:");
            System.out.println("1:set using methods\n2:set using
constructor");
            int ch = ss.nextInt();
            if (ch == 1) {
                b1[i] = new Book();
                b1[i].setdetails();
            } else {
                b1[i] = new Book("Kings", "Kingsley", 1000, 1500);
            }
        }
        for (int i = 0; i < n; i++) {
            System.out.println("\n PRINRING BOOK DETAILS");
            System.out.println("1:Display using methods\n2:Display using
toString");
            int ch = ss.nextInt();

```

```
    if (ch == 1) {  
        b1[i].getdetails();  
        System.out.println();  
    } else {  
        String details = b1[i].toString();  
        System.out.println(details);  
    }  
}  
}  
}
```

OUTPUT:

Command Prompt

```
C:\Users\Admin\Documents>javac Bookdemo.java

C:\Users\Admin\Documents>java Bookdemo
Enter the no of Books:
2
ENTER DETAILS:
1:set using methods
2:set using constructor
1
Enter the book Name:
haha
Enter the Author Name:
hahaha
Enter the Price:
100
Enter the No.Of Pages:
200
DETAILS SET SUCCESFULLY
ENTER DETAILS:
1:set using methods
2:set using constructor
2

    PRINRING BOOK DETAILS
1:Display using methods
2:Display using toString
1
NAME: haha
AUTHOR: hahaha
PRICE: 100
NO.OF PAGES: 200

    PRINRING BOOK DETAILS
1:Display using methods
2:Display using toString
2
NAME: Kings
AUTHOR: Kingsley
PRICE: 1000
No.Of Pages: 1500
```