WEEK 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:

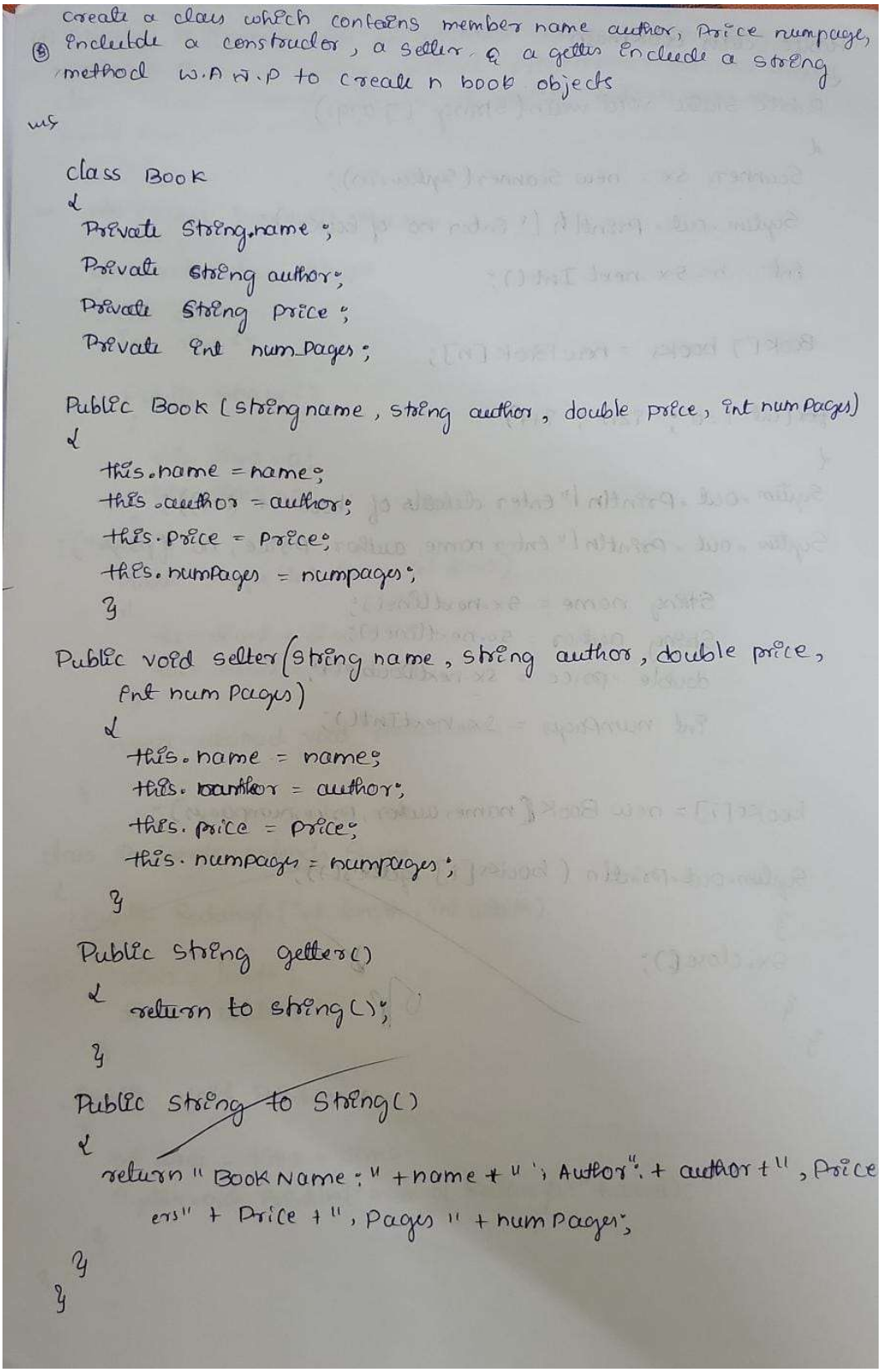
```
import java.util.Scanner;

class Book {
    int price;
    String author;
    String name;
    int pages;

    public Book(int price, String author, String name, int pages) {
        this.price = price;
        this.author = author;
        this.name = name;
        this.pages = pages;
    }
    public void setter() {
        System.out.println("enter the price,author,name and pages of the book");
        Scanner sc = new Scanner(System.in);
         this.price=sc.nextInt();
         this.author= sc.next();
         this.name=sc.next();
         this.pages=sc.nextInt();
    }

    public void getter() {
        System.out.println("Book Details:");
        System.out.println("Price:"+price);
        System.out.println("Author:"+author);
        System.out.println("Name:"+name);
        System.out.println("Pages:"+pages);
    }

    public String toString() {
                return "these are book details";
    }
}
```

```java
public class Pro {
    public static void main(String[] args) {
        Scanner s1 = new Scanner(System.in);
        System.out.println("enter the number of books");
        int n = s1.nextInt();

       Book []b1 = new Book[n];

        for(int i=0;i<n;i++){
            b1[i] = new Book(200,"sachin","The Pride",111);
            b1[i].getter();
            b1[i].setter();
            b1[i].getter();
         System.out.println(b1[i]);

        }
    }
}
```

OUTPUT:

```
enter the number of books
1
Book Details:
Price:200
Author:sachin
Name:The Pride
Pages:111
enter the price,author,name and pages of the book
150
virat
TheCentury
120
Book Details:
Price:150
Author:virat
Name:TheCentury
Pages:120
these are book details
```

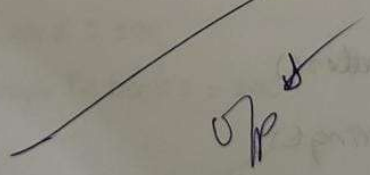
OBSERVATION:



⑤ Create a class which contains member name author, Price numpages, Include a constructor, a setter & a getter include a string method W.A.W.P to create n book objects

```
class Book
{
  Private String name;
  Private String author;
  Private String 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.numPages = numpages;
  }

  Public void setter (string name, string author, double price,
      Int num Pages)
  {
    this.name = name;
    this.author = author;
    this.price = price;
    this.numpages = numpages;
  }

  Public string getter()
  {
    return to string();
  }

  Public string to String()
  {
    return "Book Name:" + name + "'; Author": + author + ", Price
      ers" + Price + ", Pages " + num Pages;
  }
}
```

```
Public class Bookmain
{
  Public static void main(String [] args)
  {
    Scanner sx = new Scanner(System.in);
    System.out.println(" Enter no. of books");
    int   n = sx.nextInt();

  Book[] books = new Book[n];

for(int i=0 ; i<n ; i++)
{
System.out.println(" Enter details of book" + (i+1));
System.out.println(" Enter name, author, price, no of pages");

        String name = sx.nextLine();
        String author = sx.nextLine();
        double price = sx.nextDouble();
        int numpages = sx.nextInt();

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

  System.out.println ( books[i] .getter());
   }
   sx.close();
  }
}
```



OUTPUT :- Book :

Enter the number of books : 2
Enter name of book 1 : ABC
Enter author of book 1 : XYZ
Enter Price of book 1 : 99
Enter number of Pages in book 1 = 150

Enter the name of book 2 : abc
Enter author of book 2 : xyz
Enter Price of book 2 : 199
Enter number of Pages in book 2 = 200

Book Details :
Book name : ABC
Author name : XYZ
Price : 99
Number of Pages : 150

Book name : abc
Author name : xyz
Price : 199
number of pages : 200