Week 4//Lab 2

Extra program(2)

2. Develop a Java program to create a class Book with members – bookid, booktitle, no_of_pages, year_of_pub, author, publisher and price. Create three objects of book class. Include methods in Book class that do the following:

a. Accepting the book details

b. Displaying the book details

c. Accept the author name and display the book details.

d. Display the booktitle of the most expensive book

e. Display the count of the books published in the year 2020.

f. Display the book details of the book with the least number of pages.

```
import java.util.*;

class book
{
	int bookid;
	String booktitle;
	int no_of_pages;
	int year_of_pub;
	String author;
	String publisher;
	float price;

	void input()
	{
		Scanner in=new Scanner(System.in);
		Scanner in1=new Scanner(System.in);
		System.out.print("Enter Book ID : ");
```

```
        bookid = in.nextInt();
        System.out.print("Enter Book Title : ");
        booktitle = in1.nextLine();
        System.out.print("Enter Number of pages in the book : ");
        no_of_pages = in.nextInt();
        System.out.print("Enter Year of Publication : ");
        year_of_pub= in.nextInt();
        System.out.print("Enter Name of the Author : ");
        author = in1.nextLine();
        System.out.print("Enter Name of the Publisher : ");
        publisher = in1.nextLine();
        System.out.print("Enter Price of the Book : ");
        price = in.nextFloat();
}
void display()
{
        System.out.println("\nBook ID : " + bookid);
        System.out.println("Book Title : " + booktitle);
        System.out.println("Number of pages in the book : " + no_of_pages);
        System.out.println("Year of publication : " + year_of_pub);
        System.out.println("Name of the Author : " + author);
        System.out.println("Name of the Publisher : " + publisher);
        System.out.println("Price of the book : " + price);
}
int auth(String a,int i)
{

        if(author.equals(a))
        {
```

```
                i++;
                display();
        }
        return i;
}
void exp(book b2,book b3)
{
        if(price>b2.price&&price>b3.price)
        System.out.println(booktitle);
        else if(b2.price>price&&b2.price>b3.price)
        System.out.println(b2.booktitle);
        else if(b3.price>price&&b3.price>b2.price)
        System.out.println(b3.booktitle);
        else
        System.out.println("Any 2/All 3 books have highest price");
}
int c2020(book b2,book b3)
{
        int c=0;
        if(year_of_pub==2020)
        c++;
        if(b2.year_of_pub==2020)
        c++;
        if(b3.year_of_pub==2020)
        c++;
        return c;
}
void lesspg(book b2,book b3)
{
```

```
            if(no_of_pages<b2.no_of_pages&&no_of_pages<b3.no_of_pages)
            display();
            else if(b2.no_of_pages<no_of_pages&&b2.no_of_pages<b3.no_of_pages)
            b2.display();
            else if(b3.no_of_pages<no_of_pages&&b3.no_of_pages<b2.no_of_pages)
            b3.display();
            else
            System.out.println("Any 2/All 3 books have least No. of pages");
        }



}
class bookmain
{
  public static void main(String[] args)
  {
        book b1=new book();
        book b2=new book();
        book b3=new book();
        Scanner in=new Scanner(System.in);
        System.out.println("\nEnter book 1 details\n");
        b1.input();
        System.out.println("\nEnter book 2 details\n");
        b2.input();
        System.out.println("\nEnter book 3 details\n");
        b3.input();
        System.out.println("\nPrinting book details\nBook 1: \n");
        b1.display();
        System.out.println("\nBook 2: \n");
```

```
        b2.display();
        System.out.println("\nBook 3: \n");
        b3.display();
        System.out.println("\nEnter Author Name to be checked");
        String a=in.nextLine();
        int i=0;
        i=b1.auth(a,i);
        i=b2.auth(a,i);
        i=b3.auth(a,i);
        if(i==0)
                System.out.println("\nName does not match");
        System.out.print("\nTitle of most Expensive book: ");
        b1.exp(b2,b3);
        int count=b1.c2020(b2,b3);
        System.out.println("\nNo of books published in 2020: "+count);
        System.out.println("\nBook With least number of pages: ");
        b1.lesspg(b2,b3);
  }
}
```

```
C:\Users\RAJ\Desktop\c prog\Java\Week 3>javac bookmain.java

C:\Users\RAJ\Desktop\c prog\Java\Week 3>java bookmain

Enter book 1 details

Enter Book ID : 11
Enter Book Title : 1
Enter Number of pages in the book : 1
Enter Year of Publication : 1
Enter Name of the Author : 1
Enter Name of the Publisher : 1
Enter Price of the Book : 1

Enter book 2 details

Enter Book ID : 22
Enter Book Title : 2
Enter Number of pages in the book : 2
Enter Year of Publication : 2
Enter Name of the Author : 2
Enter Name of the Publisher : 2
Enter Price of the Book : 2

Enter book 3 details

Enter Book ID : 33
Enter Book Title : 3
Enter Number of pages in the book : 3
Enter Year of Publication : 3
Enter Name of the Author : 3
Enter Name of the Publisher : 3
Enter Price of the Book : 3


Printing book details
Book 1:

Book ID : 11
Book Title : 1
Number of pages in the book : 1
Year of publication : 1
Name of the Author : 1
Name of the Publisher : 1
Price of the book : 1.0

Book 2:


Book ID : 22
Book Title : 2
Number of pages in the book : 2
Year of publication : 2
Name of the Author : 2
Name of the Publisher : 2
Price of the book : 2.0

Book 3:


Book ID : 33
Book Title : 3
Number of pages in the book : 3
Year of publication : 3
Name of the Author : 3
Name of the Publisher : 3
Price of the book : 3.0

Enter Author Name to be checked
2

Book ID : 22
Book Title : 2
```

```
Number of pages in the book : 2
Year of publication : 2
Name of the Author : 2
Name of the Publisher : 2
Price of the book : 2.0

Title of most Expensive book: 3

No of books published in 2020: 0

Book With least number of pages:

Book ID : 11
Book Title : 1
Number of pages in the book : 1
Year of publication : 1
Name of the Author : 1
Name of the Publisher : 1
Price of the book : 1.0

C:\Users\RAJ\Desktop\c prog\Java\Week 3>
```