WEEK4---LAB2 PROGRAMS

PROGRAM—1

```
import java.util.*;

class Player {

	String id;

	String name;

	int scores[];

	int no_matches_played;


	void accept()

	{

		Scanner s=new Scanner(System.in);

		System.out.println("Enter the Player details:");

		System.out.println("ID:");

		id=s.next();

		System.out.println("Name:");

		name=s.next();

		System.out.println("Number of matches played:");

		no_matches_played=s.nextInt();

		scores=new int[no_matches_played];

		for(int i=0;i<no_matches_played;i++)

		{

			System.out.println("Enter the score in match "+(i+1)+":");

			scores[i]=s.nextInt();

		}
```

```
}

void display()
{
	System.out.println("Player details with greater average score:");
	System.out.println("ID: "+id);
	System.out.println("Name: "+name);
	System.out.println("Number of matches played: "+no_matches_played);
	for(int i=0;i<no_matches_played;i++)
	{
		System.out.println("Score in match "+(i+1)+":"+scores[i]);
	}

}
double calculate(){
	int sum=0;
	for(int i=0;i<no_matches_played;i++)
	{
		sum=sum+scores[i];
	}
	return (double)sum/no_matches_played;
}
```

```
}
class Plymain {
	public static void main(String ss[]) {
		Player p1=new Player();
		p1.accept();
		Player p2=new Player();
		p2.accept();
		if(p1.calculate()>p2.calculate())
		{
			p1.display();
			System.out.println("Average score: "+p1.calculate());
		}
		else
		{
			p2.display();
			System.out.println("Average score: "+p2.calculate());
		}
	}
}
```

PROGRAM---2

```
import java.util.Scanner;
class Book
{
   private int id;
   private String title;
```

```
private int np;
private int yr;
private String auth;
private String pub;
private double p;
void getdetails()
{
   Scanner s=new Scanner(System.in);
   System.out.println("ENTER ID OF BOOK");
   id=s.nextInt();
   System.out.println("ENTER THE TITLE OF BOOK");
   title=s.next();
   System.out.println("ENTER NUMBER OF PAGES OF BOOK");
   np=s.nextInt();
   System.out.println("ENTER YEAR OF PUBLISHING OF THE BOOK");
   yr=s.nextInt();
   System.out.println("ENTER AUTHOR OF BOOK");
   auth=s.next();
   System.out.println("ENTER PUBLISHER OF BOOK");
   pub=s.next();
   System.out.println("ENTER PRICE OF BOOK");
   p=s.nextDouble();
}
void printdetails()
{
```

```
    System.out.print(" ID OF BOOK: "+id);
    System.out.println("  THE TITLE OF BOOK: "+title);
    System.out.print(" NUMBER OF PAGES OF BOOK: "+np);
    System.out.println("   YEAR OF PUBLISHING OF THE BOOK: "+yr);
    System.out.print(" AUTHOR OF BOOK: "+auth);
    System.out.println("    PUBLISHER OF BOOK: "+pub);
    System.out.println(" PRICE OF BOOK: "+p);
}
double price()
{
    return p;
}
void displaybooktitle()
{
    System.out.println(title);
}
int year()
{
    return yr;
}
int pages()
{
    return np;
}
String author()
```

```
{
  return auth;
}
}
class bookmain
{
   public static void main(String args[])
   {
      int c=0;
      Book b1=new Book();
      Book b2=new Book();
      Book b3=new Book();
      b1.getdetails();
      b2.getdetails();
      b3.getdetails();
      System.out.println("ENTER THE DETAILS OF THE BOOK1");
      b1.printdetails();
      System.out.println("ENTER THE DETAILS OF THE BOOK2");
      b2.printdetails();
      System.out.println("ENTER THE DETAILS OF THE BOOK3");
      b3.printdetails();
      if(b1.price()>=b2.price() && b1.price()>=b3.price())
      {
      System.out.print("THE MOST EXPENSIVE BOOK IS WITH TITLE:  ");
      b1.displaybooktitle();
```

```
}
else if(b2.price()>=b1.price() && b2.price()>=b3.price())
{
System.out.print("THE MOST EXPENSIVE BOOK IS WITH TITLE:  ");
b2.displaybooktitle();
}
else
{
System.out.print("THE MOST EXPENSIVE BOOK IS WITH TITLE:  ");
b3.displaybooktitle();
}
if(b1.year()==2020)
c++;
if(b2.year()==2020)
c++;
if(b3.year()==2020)
c++;
System.out.println("THE NUMBER OF BOOKS PUBLISHED IN THE YEAR 2020 = "+c);
if(b1.pages()<=b2.price() && b1.price()<=b3.price())
{
System.out.println("THE  BOOK  WITH LEAST NUMBER OF PAGES IS BOOK 1 ");
b1.printdetails();
}
else if(b2.pages()<=b1.pages() && b2.pages()<=b3.pages())
{
```

```
        System.out.println("THE  BOOK  WITH LEAST NUMBER OF PAGES IS BOOK 2 ");
        b2.printdetails();
        }
        else
        {
           System.out.println("THE  BOOK  WITH LEAST NUMBER OF PAGES IS BOOK 3 ");
           b3.printdetails();
        }
    System.out.println("ENTER THE AUTHOR NAME WHOSE BOOK DETAILS NEED TO BE DISPLAYED");
    Scanner s1=new Scanner(System.in);
    String auth1=s1.next();
    if(auth1.compareToIgnoreCase(b1.author())==0)
    b1.printdetails();
   else if(auth1.compareToIgnoreCase(b2.author())==0)
    b1.printdetails();
   else if(auth1.compareToIgnoreCase(b3.author())==0)
    b1.printdetails();
    else
      System.out.println("THE GIVEN AUTHOR'S BOOK IS NOT FOUND");
}
}
```