

1:Write A program to find highest average of two players ,using constructors

```
import java.util.*;
import java.lang.*;
import java.io.*;

public class extra5
{
    public static String id;
    public static String name;
    public static int[] scores;
    public static int no_of_matches_played;
    static double sum=0;
    static double average;
    public extra5(String i,String n,int mat)
    {
        id=i;
        name=n;
        no_of_matches_played=mat;
        scores=new int[no_of_matches_played];
    }
    public static void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Scores Of The Player In The matches");
        for(int i=0;i<no_of_matches_played;i++)
        {
            System.out.println("enter the Score Scored By The Player in the match " + (i+1));
            scores[i]=sc.nextInt();
        }
    }
    public static double calc()
```

```

{

    for(int i=0;i<no_of_matches_played;i++)
    {
        sum+=scores[i];
    }

    average=sum/no_of_matches_played;
    //System.out.println("Sum Of His Scores In All Matches " + sum);
    sum=0;
    return average;
}

public static void display()
{
    System.out.println("ID of the player is " + id);
    System.out.println("Name Of The Player is " + name);
    // System.out.println("Total Score scored by the player is " + sum);
    //System.out.println("Average Score Of The Player is " + calc());

}
}

```

```

import java.util.*;
import java.lang.*;
public class testplayer
{
    static String[] id;
    static String[] name;
    static int[] no;
    static int n;

```

```

public static void main(String[] args)
{
    Scanner sc=new Scanner(System.in);
    id=new String[2];
    name=new String[2];
    no=new int[2];

    for(int i=0;i<2;i++)
    {
        System.out.println("Enter the Id Of The Player " + (i+1));
        id[i]=sc.next();
        System.out.println("Enter the name Of Player " + (i+1));
        name[i]=sc.next();
        System.out.println("Enter the Number of matches Played By The Player" + (i+1));
        no[i]=sc.nextInt();
    }
    extra5 ob1=new extra5(id[0],name[0],no[0]);
    ob1.read();
    double av1=ob1.calc();

    //System.out.println(av1);

    extra5 ob2=new extra5(id[1],name[1],no[1]);
    ob2.read();
    double av2=ob2.calc();
    System.out.println("Average of the player 1 is" + av1);
    System.out.println("Average Of the player 2 is " + av2);
    System.out.println("Details Of the Player With Highest Average is");
    System.out.println();

    if(av1>av2)

```

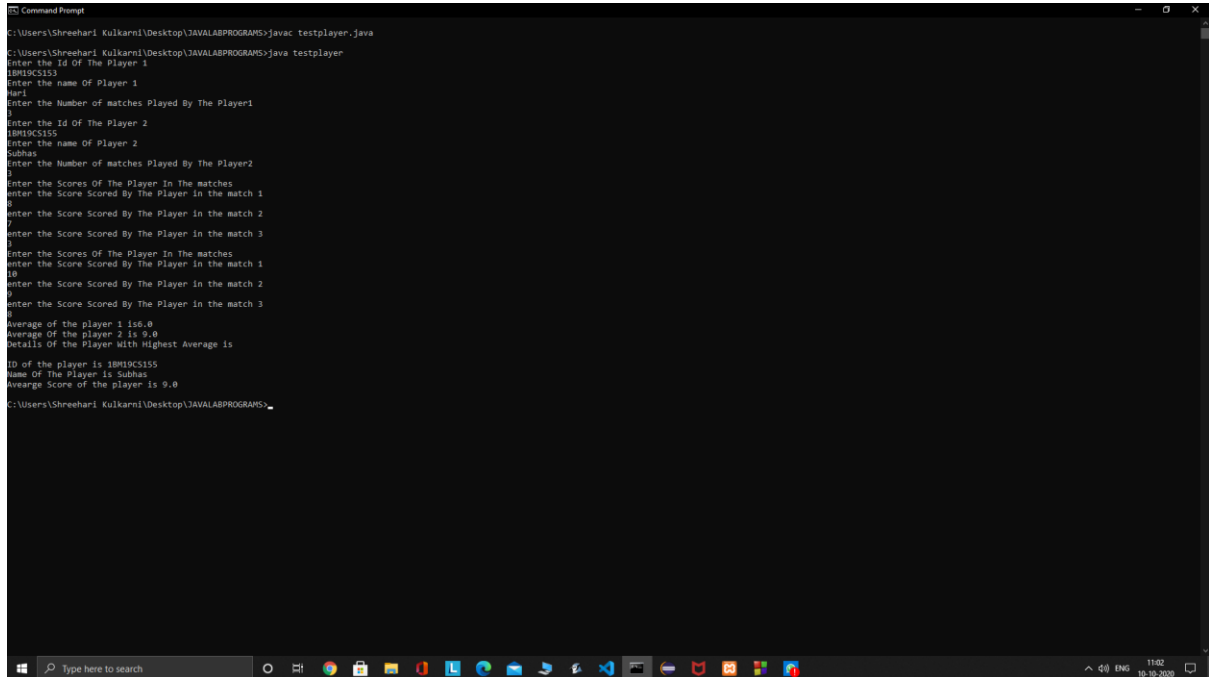
```
{
    extra5 ob=new extra5(id[0],name[0],no[0]);
    ob.display();
    System.out.println("Avearge Score of the player is " + av1);
}
else if(av1<av2)
{
    extra5 ob=new extra5(id[1],name[1],no[1]);
    ob.display();
    System.out.println("Avearge Score of the player is " + av2);
}
else{
    System.out.println("BOTH THE PLAYERS HAVE SAME AVERAGE");
    System.out.println("Their Details Are ");
    extra5 obj1=new extra5(id[0],name[0],no[0]);
    ob1.display();

    extra5 obj2=new extra5(id[1],name[1],no[1]);
    ob2.display();

}

//System.out.println(av2);
}
}
```

OUTPUT:



```
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>javac testplayer.java
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>java testplayer
Enter the Id Of The Player 1
18M19CS155
Enter the name Of Player 1
Har1
Enter the Number of matches Played By The Player1
3
Enter the Id Of The Player 2
18M19CS155
Enter the name Of Player 2
Subhas
Enter the Number of matches Played By The Player2
3
Enter the Scores Of The Player In The matches
Enter the Score Scored By The Player in the match 1
8
Enter the Score Scored By The Player in the match 2
7
Enter the Score Scored By The Player in the match 3
9
Enter the Scores Of The Player In The matches
Enter the Score Scored By The Player in the match 1
10
Enter the Score Scored By The Player in the match 2
9
Enter the Score Scored By The Player in the match 3
8
Average of the player 1 is 8.0
Average Of the Player 2 is 9.0
Details Of the Player With Highest Average is
ID of the Player is 18M19CS155
Name Of The Player is Subhas
Average Score of the player is 9.0
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>
```

2 WRITE A PROGRAM TO DISPLAY THE DETAILS OF BOOK,USING CONSTRUCTORS

```
import java.util.*;
import java.io.*;
import java.lang.*;
public class extra6
{
    public static String bookid;
    public static String booktitle;
    public static int[] no_of_pages;
    public static int[] year_of_pub;
    public static String author;
    public static String publisher;
    public static double[] price;
```

```

public static int n;

public extra6(String id,String title,String au,String pub,int count)
{
    bookid=id;
    booktitle=title;
    author=au;
    publisher=pub;
    n=count;

}

public extra6()
{
    no_of_pages=new int[3];
    price=new double[3];
    year_of_pub=new int[3];
}

public static void read()
{
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter the Number Of books ");
    n=sc.nextInt();
    System.out.println("Enter the price of the book");
    for(int i=0;i<n;i++)
    {
        System.out.println("Enter the price of book " + (i+1));
        price[i]=sc.nextDouble();

        System.out.println("Enter the no of pages of book " + (i+1));
        no_of_pages[i]=sc.nextInt();

        System.out.println("Enter the year of publication ");
        year_of_pub[i]=sc.nextInt();
    }
}

```

```

}

public static double most_exp()
{
    double max=0;
    for(int i=0;i<n;i++)
    {
        if(price[i]>max)
        {
            max=price[i];
        }

    }

    return max;
}

public static int pub_in_2020()
{
    int count=0;
    for(int i=0;i<n;i++)
    {
        if(year_of_pub[i]==2020)
            count++;
    }

    return count;
}

public static int least()
{
    int min=no_of_pages[0];
    for(int i=0;i<n;i++)
    {
        if(no_of_pages[i]<min)
        {

```

```

        min=no_of_pages[i];
    }
}
return min;
}
public static void display()
{
    System.out.println("Book Name is " + booktitle);
    System.out.println("BookID is " + bookid);
    System.out.println("Author of book is " + author);
    System.out.println("Publisher of book is " + publisher);
}
}

```

```

import java.util.*;
import java.io.*;
import java.lang.*;
public class testbook
{
    public static String[] bookid;
    public static String[] booktitle;
    public static String[] author;
    public static String[] publisher;
    static int n;
    public static void main(String[] args)
    {
        double a=0;
        double b=0;
        Scanner sc=new Scanner(System.in);
    }
}

```



```

System.out.println("Enter the number of books ");
n=sc.nextInt();
bookid=new String[n];
booktitle=new String[n];
author=new String[n];
publisher=new String[n];
for(int i=0;i<n;i++)
{
    System.out.println("Enter the book id of book " + (i+1));
    bookid[i]=sc.next();
    System.out.println("Enter the book title of the book " + (i+1));
    booktitle[i]=sc.next();
    System.out.println("Enter the author of book " + (i+1));
    author[i]=sc.next();
    System.out.println("Enter the name of the publisher for the book " + (i+1));
    publisher[i]=sc.next();
}
extra6 ob=new extra6();
ob.read();
extra6 ob1=new extra6(bookid[0],booktitle[0],author[0],publisher[0],n);
a=ob1.most_exp();
b=ob1.least();
if(ob1.price[0]==a)
{
    System.out.println("*****Details Of the Costliest Book is *****");
    System.out.println("Price Of the Costliest Book Is " + a);
    ob1.display();
    a=0;
}
if(ob1.no_of_pages[0]==b)
{

```

```

        System.out.println("*****Details Of the Book Least Number Of
Pages*****");

        System.out.println("Number Pages In the book is " + b);

        ob1.display();

        b=0;
    }

    extra6 ob2=new extra6(bookid[1],booktitle[1],author[1],publisher[1],n);

    a=ob2.most_exp();

    b=ob2.least();

    if(ob2.price[1]==a)
    {

        System.out.println("*****Details Of the Costliest Book is *****");

        System.out.println("Price Of the Costliest Book Is " + a);

        ob2.display();

        a=0;

    }

    if(ob2.no_of_pages[1]==b)
    {

        System.out.println("*****Details Of the Book Least Number Of Pages
*****");

        System.out.println("Number Pages In the book is " + b);

        ob2.display();

        b=0;

    }

    extra6 ob3=new extra6(bookid[2],booktitle[2],author[2],publisher[2],n);

    a=ob3.most_exp();

    b=ob3.least();

    if(ob3.price[2]==a)
    {

        System.out.println("*****Details Of the Costliest Book is *****");

        System.out.println("Price Of the Costliest Book Is " + a);

```

```

        ob3.display();

        a=0;

    }

    if(ob3.no_of_pages[2]==b)

    {

        System.out.println("*****Details Of the Book With least Number Of Pages is
*****");

        System.out.println("Number of Pages In the book is " + b);

        ob3.display();

        b=0;

    }

    int in_2020=ob.pub_in_2020();

    System.out.println();

    System.out.println("Numnber Of Book Published in 2020 is " + in_2020);

}

}

```

OUTPUT:

```

C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>javac testbook.java
C:\Users\Shreehari Kulkarni\Desktop\JAVALABPROGRAMS>java testbook
Enter the number of books
3
Enter the book id of book 1
18M19CS153
Enter the book title of the book 1
MERCHANT OF VENICE
Enter the author of book 1
WILLIAM SHAKESPEARE
Enter the name of the publisher for the book 1
BOWLING STAR
Enter the book id of book 2
18M19CS162
Enter the book title of the book 2
THREE MISTAKES OF MY LIFE
Enter the author of book 2
CHETAN BHAGAT
Enter the name of the publisher for the book 2
SUNSHINE
Enter the book id of book 3
18M19CS155
Enter the book title of the book 3
ROAD NOT TAKEN
Enter the author of book 3
ROBERT FRIST
Enter the name of the publisher for the book 3
XILLO PUBLISHER
Enter the Number Of books
3
Enter the price of the book
Enter the price of book 1
200
Enter the no of pages of book 1
150
Enter the year of publication
2018
Enter the price of book 2
500
Enter the no of pages of book 2
500
Enter the year of publication
2020
Enter the price of book 3
150
Enter the no of pages of book 3
100
Enter the year of publication
2018
*****Details Of the Costliest Book is *****
Price Of the Costliest Book Is 500.0
Book Name Is THREE MISTAKES OF MY LIFE
BookID is 18M19CS162
Author of book is CHETAN BHAGAT
Publisher of book is SUNSHINE
*****Details Of the Book With least Number Of Pages is *****
Number of Pages In the book is 100.0
Book Name Is ROAD NOT TAKEN
BookID is 18M19CS155
Author of book is ROBERT FRIST
Publisher of book is XILLO PUBLISHER

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