

Name : Prema

usn : 1BM19CS121

PROGRAM 1 LAB2

```
import java.util.*;
```

```
class Player{
```

```
int id;
```

```
String name;
```

```
int n;
```

```
double scores[];
```

```
double sum=0.0;
```

```
Player(){
```

```
Scanner in=new Scanner(System.in);
```

```
System.out.println("Enter the name and id of the player");
```

```
name = in.nextLine();
```

```
id = in.nextInt();
```

```
System.out.println("Enter number of matches played by the player :");
```

```
n=in.nextInt();
```

```
System.out.println("No of scores scored by played in every match :");
```

```
scores=new double[n];
```

```
for(int i=0;i<n;i++)
```

```
{
```

```
scores[i]=in.nextDouble();
```

```
}
```

```
}
```

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

```
void display(){  
    System.out.println("Details of best player among two");  
    System.out.println("Name:"+name);  
    System.out.println("id:"+id);  
    System.out.println("No of matches played:"+n);  
    System.out.println("No of scores scored by played in every match :");  
    for(int i=0;i<n;i++)  
    {  
        System.out.println(+scores[i]);  
    }  
}  
}
```

```
class Main{  
    public static void main(String args[]){
```

```
Player p1=new Player();
```

```
Player p2=new Player();
```

```
double avg1=0.0,avg2=0.0;
```

```
avg1=p1.avg_score();
```

```
System.out.println("Average score of player1."+avg1);
```

```
avg2=p2.avg_score();
```

```
System.out.println("Average score of player2."+avg2);
```

```
if(avg1>avg2)
```

```
{
```

```
System.out.println("Average score of player1 is greater :");
```

```
p1.display();
```

```
}
```

```
else
```

```
{
```

```
System.out.println("Average score of player2 is greater :");
```

```
p2.display();
```

```
}
```

```
}
```

```
}
```

OUTPUT:

```
onlinegdb.com/online_java_compiler
GDB beta
Enter the name and id of the player
PREMA
001
Enter number of matches played by the player :
3
No of scores scored by played in every match :
20
90
50
Enter the name and id of the player
DEEPIKA
002
Enter number of matches played by the player :
3
No of scores scored by played in every match :
90
80
70
Average score of player1.53.3333333333336
Average score of player2.80.0
Average score of player2 is greater :
Details of best player among two
Name: DEEPIKA
```

```
onlinegdb.com/online_java_compiler
GDB beta
DEEPIKA
002
Enter number of matches played by the player :
3
No of scores scored by played in every match :
90
80
70
Average score of player1.53.3333333333336
Average score of player2.80.0
Average score of player2 is greater :
Details of best player among two
Name: DEEPIKA
id: 2
No of matches played: 3
No of scores scored by played in every match :
90.0
80.0
70.0
...Program finished with exit code 0
Press ENTER to exit console.
```

PROGRAM 2:

```
import java.util.Scanner;

public class Main{

    public static void main(String args[]){

        Book[] B =new Book[3];

        B[0] = new Book();

        B[1] = new Book();

        B[2] = new Book();

        B[0].display();

        B[1].display();

        B[2].display();

        Book.authername(B);

        Book.expensive(B);

        Book.check(B);

        Book.pages(B);

    }

}

class Book{

    int bookid;
```

String booktitle;

int no_of_pages;

int yr_of_pub;

String author;

String publisher;

double price;

int count=0 ;

String authername;

```
Book(){  
  
Scanner in=new Scanner(System.in);  
  
System.out.println("Enter Book id:");  
  
this.bookid=in.nextInt();  
  
System.out.println("Enter Book title :");  
  
in.nextLine();  
  
this.booktitle=in.nextLine();  
  
System.out.println("Enter author name: ");  
  
this.author=in.nextLine();  
  
System.out.println("Enter publisher name :");  
  
this.publisher=in.nextLine();  
  
System.out.println("Enter no of pages :");  
  
this.no_of_pages=in.nextInt();  
  
System.out.println("Enter year of publish of the book: ");  
  
this.yr_of_pub=in.nextInt();
```

```
System.out.println("Enter Book price:");  
  
this.price=in.nextDouble();  
  
}
```

```
public void display(){  
  
System.out.println("BOOK DETAILS:");  
  
System.out.println("Book id:"+bookid);  
  
System.out.println("Book title :"+booktitle);  
  
System.out.println("no of pages :"+no_of_pages);  
  
System.out.println("year of publish of the book:"+yr_of_pub);  
  
System.out.println("author name: "+author);  
  
System.out.println("publisher name :"+publisher);  
  
System.out.println("Book price:"+price);  
  
}
```

```
public static void check(Book [] B){  
  
int count=0;  
  
for(int i=0;i<B.length;i++) {  
  
if(B[i].yr_of_pub==2000)  
  
{  
  
count++;  
  
}}}
```

```
System.out.println("No of books published in the year 2000"+count);  
}
```

```
public static void authornae(Book[] B){
```

```
    System.out.println("Enter the author name here");
```

```
    Scanner in=new Scanner(System.in);
```

```
    String authornae=in.nextLine();
```

```
    if(authornae==B[0].author)
```

```
    {
```

```
        B[0].display();
```

```
    }
```

```
    else if(authornae==B[1].author)
```

```
    {
```

```
        B[1].display();
```

```
    }
```

```
    else if(authornae==B[2].author)
```

```
    {
```

```
        B[2].display();
```

```
    }
```

```
    else
```

```
    {
```

```
        System.out.println("Sorry not found");
```



```
}
```

```
}
```

```
public static void expensive(Book[] B){
```

```
if((B[0].price>B[1].price) && (B[0].price>B[2].price))
```

```
{
```

```
System.out.println("B1 is more expensive and booktitle is"+B[0].booktitle);
```

```
}
```

```
else if((B[1].price>B[0].price) && (B[1].price>B[2].price))
```

```
{
```

```
System.out.println("B2 is more expensive and booktitle is "+B[1].booktitle);
```

```
}
```

```
else
```

```
{
```

```
System.out.println("B3 is more expensive and booktitle is"+B[2].booktitle);
```

```
}
```

```
}
```

```
public static void pages(Book[] B){
```

```
if((B[0].no_of_pages<B[1].no_of_pages) && (B[0].no_of_pages<B[2].no_of_pages))
```

```
{
```

```
System.out.println("B1 hasleast no of pages");
```

```
B[0].display();
```

```
}
```

```

else if((B[1].no_of_pages>B[0].no_of_pages) && (B[1].no_of_pages>B[2].no_of_pages))
{
    System.out.println("B2 has least no of pages");

    B[1].display();
}

else
{
    System.out.println("B3 has least no of pages");

    B[2].display();
}
}
}

```

OUTPUT:

The screenshot shows a web browser window with an online Java compiler. The input field contains the following text:

```

Enter Book id:
001
Enter Book title :
PREMA THE LOVE
Enter author name:
SIDHARTH
Enter publisher name :
ANAND
Enter no of pages :
300
Enter year of publish of the book:
2000
Enter Book price:
12000
Enter Book id:
002
Enter Book title :
THE LION KING
Enter author name:
TARUN
Enter publisher name :
BALAJI
Enter no of pages :

```

The output of the program is not visible in the screenshot.

```
db.com/online_java_compiler

Enter no of pages :
600
Enter year of publish of the book:
1950
Enter Book price:
300
Enter Book id:
003
Enter Book title :
THE CSK FAN
Enter author name:
PREMA
Enter publisher name :
SID SINCE 2020
Enter no of pages :
400
Enter year of publish of the book:
2020
Enter Book price:
20000
BOOK DETAILS:
Book id:1
Book title :PREMA THE LOVE
```

```
db.com/online_java_compiler

Input
year of publish of the book:2000
author name: SIDDARTH
publisher name :AMOGH
Book price:12000.0
BOOK DETAILS:
Book id:2
Book title :THE LION KING
no of pages :600
year of publish of the book:1950
author name: TAHUN
publisher name :BALAJI
Book price:300.0
BOOK DETAILS:
Book id:3
Book title :THE CSK FAN
no of pages :400
year of publish of the book:2020
author name: PREMA
publisher name :SID SINCE 2020
Book price:20000.0
Enter the author name here
AMOGH
Sorry not found
```

```
db.com/online_java_compiler

Input
no of pages :400
year of publish of the book:2020
author name: PREMA
publisher name :SID SINCE 2020
Book price:20000.0
Enter the author name here
AMOGH
Sorry not found
B3 is more expensive and booktitle isTHE CSK FAN
No of books published in the year 20001
B1 hasleast no of pages
BOOK DETAILS:
Book id:1
Book title :PREMA THE LOVE
no of pages :300
year of publish of the book:2000
author name: SIDDARTH
publisher name :AMOGH
Book price:12000.0

...Program finished with exit code 0
Press ENTER to exit console.
```