```
import java.util.Scanner;
class Book{
    private String bookid;
    private String booktitle;
    private int no_of_pages;
    private int year_of_pub;
    private String author;
    private String publisher;
    private double price;
    Scanner sc = new Scanner(System.in);
    void getDetails(){
        System.out.println("Enter book id:");
        bookid = sc.next();
        System.out.println("Enter book title:");
        booktitle = sc.next();
        System.out.println("Enter no of pages:");
        no_of_pages = sc.nextInt();
        System.out.println("Enter year of publication:");
        year_of_pub = sc.nextInt();
        System.out.println("Enter author name:");
        author = sc.next();
        System.out.println("Enter publisher name:");
        publisher = sc.next();
        System.out.println("Enter price:");
        price = sc.nextDouble();
    }

    void printDetails(){
        System.out.println("The book details are:");
        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: "+year_of_pub);
        System.out.println("author name: "+ author);
        System.out.println("publisher: "+ publisher);
        System.out.println("price: "+ price);

    }

    String bookByAuthor(){
        return author;
    }
```

```
    String bookByAuthor(){
        return author;
    }

    double expensive(){
        return price;
    }

    int count(){
        return year_of_pub;
    }
    int pages(){
        return no_of_pages;
    }
}

public class B {
    public static void main(String[] args){
    Book b1 = new Book();
    Book b2 = new Book();
    Book b3 = new Book();
    Scanner sc = new Scanner(System.in);
    System.out.println("\n\nBook 1");
    b1.getDetails();
    System.out.println("\n\nBook 2");
    b2.getDetails();
    System.out.println("\n\nBook 3");
    b3.getDetails();
    System.out.println("\n\nBook 1");
    b1.printDetails();
    System.out.println("\n\nBook 2");
    b2.printDetails();
    System.out.println("\n\nBook 3");
    b3.printDetails();

    String auth, bk1, bk2, bk3;
    System.out.println("\n\nEnter author name to find his book:");
    auth = sc.next();
    bk1 = b1.bookByAuthor();
    if (bk1.equals(auth)){
        b1.printDetails();
    }
```

```
if (bk1.equals(auth)){
    b1.printDetails();
}
bk2 = b2.bookByAuthor();
if (bk2.equals(auth)){
    b2.printDetails();
}
bk3 = b3.bookByAuthor();
if (bk3.equals(auth)){
    b3.printDetails();
}

double p1, p2, p3;
p1 = b1.expensive();
p2 = b2.expensive();
p3 = b3.expensive();
System.out.println("\n\nThe details of most expensive book are:");
if(p1>p2){
    if(p1>p3){
       b1.printDetails();
    }
    else{
        b3.printDetails();
    }
}
else {
    if(p2>p3){
        b2.printDetails();
    }
    else{
        b3.printDetails();
    }
}

int count = 0,c1, c2, c3;
c1 = b1.count();
if(c1==2020){
    count++;
}
c2 = b2.count();
if(c2==2020){
    count++;
```

```
    }
}

int count = 0,c1, c2, c3;
c1 = b1.count();
if(c1==2020){
    count++;
}
c2 = b2.count();
if(c2==2020){
    count++;
}
c3 = b3.count();
if(c3==2020){
    count++;
}
System.out.println("\n\nno of books published in 2020: "+ count);

int page, pg1, pg2, pg3;
pg1=b1.pages();
pg2=b2.pages();
pg3=b3.pages();
System.out.println("\n\nbook with least pages:");
     if(pg1<pg2){
    if(pg1<pg3){
       b1.printDetails();
    }
    else{
        b3.printDetails();
    }
}
else {
    if(pg2<pg3){
        b2.printDetails();
    }
    else{
        b3.printDetails();
    }
}
}
}
```

```
Book 1
Enter book id:
1
Enter book title:
a
Enter no of pages:
250
Enter year of publication:
2017
Enter author name:
p
Enter publisher name:
l
Enter price:
2000


Book 2
Enter book id:
2
Enter book title:
b
Enter no of pages:
300
Enter year of publication:
2020
Enter author name:
q
Enter publisher name:
r
Enter price:
1500


Book 3
Enter book id:
3
Enter book title:
c
Enter no of pages:
380
Enter year of publication:
2020
Enter author name:
o
Enter publisher name:
i
Enter price:
3000
```

```
Book 1
The book details are:
book id: 1
book title: a
no of pages: 250
year of publish: 2017
author name: p
publisher: l
price: 2000.0


Book 2
The book details are:
book id: 2
book title: b
no of pages: 300
year of publish: 2020
author name: q
publisher: r
price: 1500.0


Book 3
The book details are:
book id: 3
book title: c
no of pages: 380
year of publish: 2020
author name: o
publisher: i
price: 3000.0


Enter author name to find his book:
a


The details of most expensive book are:
The book details are:
book id: 3
book title: c
no of pages: 380
year of publish: 2020
author name: o
publisher: i
price: 3000.0
```

```
Book 3
The book details are:
book id: 3
book title: c
no of pages: 380
year of publish: 2020
author name: o
publisher: i
price: 3000.0


Enter author name to find his book:
a


The details of most expensive book are:
The book details are:
book id: 3
book title: c
no of pages: 380
year of publish: 2020
author name: o
publisher: i
price: 3000.0


no of books published in 2020: 2


book with least pages:
The book details are:
book id: 1
book title: a
no of pages: 250
year of publish: 2017
author name: p
publisher: l
price: 2000.0

C:\Users\PUNEETH K\Desktop\JAVA>
```

```
import java.util.*;
class Player{
	int id;
	String name;
	int matches;
	int score[]=new int[matches];
	void setDim(){
		Scanner in = new Scanner(System.in);
		System.out.println("Enter the Player name");
		name = in.nextLine();
		System.out.println("Enter Player Id");
		id = in.nextInt();
		System.out.println("Enter number of matches played");
		matches = in.nextInt();
		System.out.println("Enter the Scores of player");
		score = new int[matches];
		for(int i=0;i<matches;i++){
			score[i]=in.nextInt();
		}
	}
	double Calculate(){
		double avg=0;
		for(int i=0;i<matches;i++)
			avg+=score[i];
		return avg/matches;
	}
}
class Play{
	public static void main(String args[]){
		Player p1 = new Player();
		Player p2 = new Player();
		p1.setDim();
		p2.setDim();
		if(p1.Calculate()>p2.Calculate())
			System.out.println("Player 1 average score is "+p1.Calculate()+" and is grater than player 2 average that is "+p2.Calculate());
		else
			System.out.println("Player 2 average score is "+p2.Calculate()+" and is grater than player 1 average that is "+p1.Calculate());
	}
}
```

```
C:\Users\PUNEETH K\Desktop\JAVA>javac Play.java

C:\Users\PUNEETH K\Desktop\JAVA>java Play
Enter the Player name
pun
Enter Player Id
125
Enter number of matches played
3
Enter the Scores of player
56
85
42
Enter the Player name
rak
Enter Player Id
456
Enter number of matches played
4
Enter the Scores of player
23
45
56
74
Player 1 average score is 61.0 and is grater than player 2 average that is 49.5

C:\Users\PUNEETH K\Desktop\JAVA>
```