

String id;  
String name;  
int scores[3];  
int no\_matches\_played;

Player ( ) p 3

```
void getDetails() {
```

```

Scanner sc = new Scanner(System.in);
System.out.print("Enter player details : ");
System.out.print("Enter ID : ");
id = sc.nextInt();
System.out.println("Enter Name : ");
name = sc.nextLine();
System.out.println("Enter number of matches played : ");
matchesPlayed = sc.nextInt();
noMatchesPlayed = sc.nextInt();
scores = new int[noMatchesPlayed];
for (int i=0; i<noMatchesPlayed; i++)
    System.out.print("Enter the score of match " + (i+1) + " : ");
scores[i] = sc.nextInt();

```

2

```
void printDetails() {  
    System.out.println("The player details  
    are : ");  
    System.out.println("T.D: " + id +  
        "\nName: " + name + "\nNo of  
        matches played : "  
        + " " + no_matches_played;  
    for (int i = 0; i < no_matches_played;  
        i++) {  
        System.out.println("The score of  
        match " + (i + 1) + " ; " + scores[i]);  
    }  
}
```

```
double avg() {  
    int sum = 0;  
    for (int i = 0; i < no_matches_played; i++) {  
        sum += scores[i];  
    }  
    return (sum / (no_matches_played + 0.0));  
}
```

```
class PlayerMain  
{
```

```
    public static void main(String[] args)
```

```
    {  
        double p1avg, p2avg;  
        Player p1 = new Player();  
        p1.getDetails();  
        Player p2 = new Player();  
        p2.getDetails();  
        p1avg = p1.avg();  
        p2avg = p2.avg();  
        if (p1avg > p2avg)  
    }
```

```
System.out.println("Player 1 has the  
greatest average score. " + p1avg);  
p1.printDetails();  
}  
else
```

```
System.out.println("Player 2 has the  
greatest average score. " + p2avg);  
p2.printDetails();  
}
```

```

2) import java.util.Scanner;
class Book
{
    int bookid;
    String booktitle;
    int no_of_pages;
    int year_of_pub;
    String author;
    String publisher;
    double price;
    void acceptDetails()
    {
        Scanner b = new Scanner(System.in);
        System.out.println("Enter the Bookid:");
        bookid = b.nextInt();
        System.out.println("Enter the Booktitle:");
        booktitle = b.next();
        System.out.println("Enter the no.of pages");
        no_of_pages = b.nextInt();
        System.out.println("Enter the year of publication:");
        year_of_pub = b.nextInt();
        System.out.println("Enter the Author's name:");
        author = b.next();
    }
}

```

```

System.out.print("Enter the Publisher:");
publisher = b.next();
System.out.print("Enter the price");
price = b.nextDouble();
}

void displayDetails()
{
    System.out.println("++ Book DETAILS ++");
    System.out.println("Bookid:" + bookid);
    System.out.println("Book title:" + booktitle);
    System.out.println("Number of pages in book:" +
                       " + no_of_pages");
    System.out.println("Year of publication:" +
                       " + year_of_pub");
    System.out.println("Author's name:" + author);
    System.out.println("Publisher:" + publisher);
    System.out.println("Price of the book:" + price);
}

Class BookMain
{
    public static void main(String args[])
    {
        Book b = new Book();
        b.acceptDetails();
        b.displayDetails();
    }
}

```

b1. acceptDetails();

Book b2 = new Book();

b2. acceptDetails();

Book b3 = new Book();

b3. acceptDetails();

if ((b1. price > b2. price) && (b1. price > b3. price))

{

System.out.println("The Book title  
of the most expensive book is:  
" + b1. booktitle);

}

else if ((b2. price > b1. price) &&  
(b2. price > b3. price))

{

System.out.println("The Book title  
of the most expensive book is:  
" + b2. booktitle);

}

else

{

System.out.println("The Book title  
of the most expensive book is:  
" + b3. booktitle);

}

if (l[1].year - of - pub = 2020) 44 (b2.year  
of - pub = 2020) 44 (b3.year - of - pub  
= 2020))

{ System.out.println("The number of book  
published in year 2020 is 3"); }

else if ([b].year-of-pub = 2020) || ([b].year-of-pub = 2021) {

System. out, print [<sup>"</sup>] the number of books published in year 2020 [<sub>"</sub> 2<sup>"</sup>];

System.out.println ("The number of book published in year 2020 is 1");  
if ((b1.no\_of\_pages < b2.no\_of\_pages) &&  
(b1.no\_of\_pages < b3.no\_of\_pages))  
no\_of\_pages);

System.out.println("The book details of the book

```
with least number of pages").  
b1. display Details;
```

```
if (b2.no_of_pages < b1.no_of_pages)  
else if (b3.no_of_pages < b2.no_of_pages)  
if (b2.no_of_pages < b3.no_of_pages)
```

{

```
System.out.println("The book details of the  
book with least number of pages:  
b2.display Details");
```

{

else

{

```
System.out.println("The book details of the  
book with least number of pages:  
b3.display Details");
```

{

{

{

# Extra Programs Week 4.

1) Develop a Java program to create a class Player with variables id, name, scores, no\_matches - played with default access specifier. Include the following:

- a) Constructors
- b) Appropriate methods that calculates the average scores of the player and display the same.

Create two player objects and display the player details who has the greater average score.

import java.util.Scanner;

View Go Run Terminal Help

Player.java - java - Visual Studio Code

BookMain.java week\_4\_Lab\_book.java

```
Playermain
java.util.*;

class Player{
    int id;
    String name;
    int[] scores[];
    int no_matches_played;

    void getDetails(){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter player details:");
        System.out.println("Enter ID:");
        id = sc.nextInt();
        System.out.println("Enter Name:");
        name = sc.nextLine();
        System.out.println("Enter number of matches played:");
        no_matches_played = sc.nextInt();
        scores = new int[no_matches_played];
        for(int i = 0; i < no_matches_played; i++){
            System.out.println("Enter the score of match " + (i+1) + ":");
            scores[i] = sc.nextInt();
        }
    }

    void printDetails(){
        System.out.println("The player details are:");
        System.out.println("ID: " + id + "\nName: " + name + "\nNo of matches played: " + no_matches_played);
        for(int i = 0; i < no_matches_played; i++){
            System.out.println("The score of the match " + (i+1) + ": " + scores[i]);
        }
    }

    double avg(){
        int sum = 0;
        for(int i = 0; i < no_matches_played; i++){
            sum += scores[i];
        }
        return (sum / (no_matches_played + 0.0));
    }
}
```

INPUT DEBUG CONSOLE TERMINAL 1: powershell

```
Playermain.main(Player.java:49)
C:\Users\Hita\Desktop\java> javac Player.java
C:\Users\Hita\Desktop\java> java Playermain
Details:
```

here to search



Ln 66, Col 2 Spaces: 4 CRLF Java



view Go Run Terminal Help

Player.java - java - Visual Studio Code

BookMain.java week\_4\_Lab\_book.java

Playermain

```
    e avg(){
        int sum = 0;
        for(int i = 0; i < no_matches_played; i++){
            sum += scores[i];
        }
        return (sum / (no_matches_played + 0.0));
    }
```

Playermain

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

```
    double p1avg,p2avg;
    Player p1 = new Player();
    p1.getDetails();
    Player p2 = new Player();
    p2.getDetails();
    p1avg = p1.avg();
    p2avg = p2.avg();
    if (p1avg > p2avg)
```

```
        System.out.println("Player 1 has the greatest average score."+p1avg);
        p1.printDetails();
    } else
```

```
        System.out.println("Player 2 has the greatest average score."+p2avg);
        p2.printDetails();
    }
```

INPUT DEBUG CONSOLE TERMINAL

1: powershell

```
Playermain.main(Player.java:49)
hita\Desktop\java> javac Player.java
hita\Desktop\java> java Playermain
Details:
```

Ln 66, Col 2 Spaces: 4 CRLF Java

here to search



```
ermain.main(Player.java:49)
hita\Desktop\java> javac Player.java
hita\Desktop\java> java Playermain
ails:
```

```
matches played:
of match 1:
of match 2:
ails:
```

```
matches played:
of match 1:
of match 2:
of match 3:
greatest average score.92.5
ls are:
```

```
ayed: 2
match 1: 89
match 2: 96
hita\Desktop\java> []
```

BookMain.java X week\_4\_Lab\_book.java

```
  Book > acceptDetails()
  va.util.Scanner;
  bookid;
  booktitle;
  no_of_pages;
  year_of_pub;
  author;
  publisher;
  price;
  tDetails()

  b=new Scanner(System.in);
  out.println("Enter the Bookid:");
  b.nextInt();
  out.println("Enter the Booktitle:");
  le=b.next();
  out.println("Enter the no. of pages:");
  pages=b.nextInt();
  out.println("Enter the year of publication:");
  year_pub=b.nextInt();
  out.println("Enter the Author's name:");
  b.next();
  out.println("Enter the Publisher:");
  her=b.next();
  out.println("Enter the Price");
  o.nextDouble();

layDetails()

n.out.println("**BOOK DETAILS**");
n.out.println("Bookid:"+bookid);
n.out.println("Booktitle:"+booktitle);
n.out.println("Number of pages in book:"+no_of_pages);
n.out.println("Year of publication:"+year_of_pub);
n.out.println("Author's name:"+author);
n.out.println("Publisher:"+publisher);
n.out.println("Price of the book:"+price);

dMain

ebug
 static void main(String args[])
book b1=new Book();
```

Ln 26, Col 42 Spaces: 4 CRLF Java

here to search



BookMain.java X week\_4\_Lab\_book.java

```
  Book > acceptDetails()
    out.println("Enter the Price");
    .nextDouble();

    displayDetails()

    out.println("**BOOK DETAILS**");
    out.println("Bookid:" + bookid);
    out.println("Booktitle:" + booktitle);
    out.println("Number of pages in book:" + no_of_pages);
    out.println("Year of publication:" + year_of_pub);
    out.println("Author's name:" + author);
    out.println("Publisher:" + publisher);
    out.println("Price of the book:" + price);
```

Main

```
public static void main(String args[])
{
    Book b1 = new Book();
    b1.acceptDetails();
    Book b2 = new Book();
    b2.acceptDetails();
    Book b3 = new Book();
    b3.acceptDetails();
    if((b1.price > b2.price) && (b1.price > b3.price))
        System.out.println("The Booktitle of the most expensive book is:" + b1.booktitle);

    else if((b2.price > b1.price) && (b2.price > b3.price))
        System.out.println("The Booktitle of the most expensive book is:" + b2.booktitle);

    else
        System.out.println("The Booktitle of the most expensive book is:" + b3.booktitle);

    if((b1.year_of_pub == 2020) && (b2.year_of_pub == 2020) && (b3.year_of_pub == 2020))
        System.out.println("The number of book published in year 2020 is 3");

    else if((b1.year_of_pub == 2020) || (b2.year_of_pub == 2020) || (b3.year_of_pub == 2020))
        System.out.println("The number of book published in year 2020 is 2");
}
```

here to search



BookMain.java X week\_4\_Lab\_book.java

```
Book > acceptDetails()
book b3=new Book();
b3.acceptDetails();
if((b1.price>b2.price)&&(b1.price>b3.price))

System.out.println("The Booktitle of the most expensive book is:"+b1.booktitle);

else if((b2.price>b1.price)&&(b2.price>b3.price))

System.out.println("The Booktitle of the most expensive book is:"+b2.booktitle);

else

System.out.println("The Booktitle of the most expensive book is:"+b3.booktitle);

if((b1.year_of_pub==2020)&&(b2.year_of_pub==2020)&&(b3.year_of_pub==2020))

System.out.println("The number of book published in year 2020 is 3");

else if((b1.year_of_pub==2020)|| (b2.year_of_pub==2020)|| (b3.year_of_pub==2020))

System.out.println("The number of book published in year 2020 is 2");

else

System.out.println("The number of book published in year 2020 is 1");

if((b1.no_of_pages<b2.no_of_pages)&&(b1.no_of_pages<b3.no_of_pages))

System.out.println("The book details of the book with least number of pages:");
b1.displayDetails();

else if((b2.no_of_pages<b1.no_of_pages)&&(b2.no_of_pages<b3.no_of_pages))

System.out.println("The book details of the book with least number of pages:");
b2.displayDetails();

else

System.out.println("The book details of the book with least number of pages:");
b3.displayDetails();
```

here to search



```
hita\Desktop\java> javac BookMain.java
hita\Desktop\java> java BookMain
:
title:
pages:
of publication:
's name:
her:
:
title:
pages:
of publication:
's name:
her:
:
title:
pages:
of publication:
's name:
her:
:
the most expensive book is:Ambassadors
book published in year 2020 is 2
of the book with least number of pages:
```

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's name:

her:

the most expensive book is:Ambassadors

book published in year 2020 is 2

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hita\Desktop\java> █

✖ Build failed, do you want to continue?

Source: Debugger for Java (Extension)