```java
import java.util.*;
class Player_1
{
    int id;
    String name;
    int score[];
    int no_of_matches;
    int sum=0;
    int avg=0;

  void getdetails()
  {
      System.out.println("Enter the player id:");
      Scanner sc = new Scanner(System.in);
      id = sc.nextInt();
      System.out.println("Enter the player name:");
      name=sc.next();
      System.out.println("Enter the no of matches:");
      no_of_matches=sc.nextInt();
      score = new int[no_of_matches];
      for(int i=0;i<no_of_matches;i++)
      {
          System.out.println("Enter the score for match"+(i+1)+":");
          score[i]=sc.nextInt();
      }
  }

  double calculate()
  {
      for(int i=0;i<no_of_matches;i++)
    sum+=score[i];
    avg=sum/no_of_matches;
     return avg;
  }

  void printdetails()
```

```java
  double calculate()
  {
      for(int i=0;i<no_of_matches;i++)
    sum+=score[i];
    avg=sum/no_of_matches;
     return avg;
  }

  void printdetails()
  {
      System.out.println("Player with higher average is:" +" "+name+" "+"with id"+" "+id+" "+"has an average of"+" "+avg);
  }
}
  class playermain
  {
      public static void main(String args[])
      {
       Player_1 p1 = new Player_1();
       Player_1 p2 = new Player_1();
       p1.getdetails();
       p2.getdetails();
       if(p1.calculate()>p2.calculate())
       {
         p1.printdetails();
        }
        else
        {
        p2.printdetails();
        }

      }

  }
```

```
Command Prompt                                                    —  ☐  ✕

Microsoft Windows [Version 10.0.18362.1082]
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C:\Users\Nikita>c:

C:\Users\Nikita>cd desktop

C:\Users\Nikita\Desktop>cd OOJ_LAB

C:\Users\Nikita\Desktop\OOJ_LAB>javac player.java

C:\Users\Nikita\Desktop\OOJ_LAB>java playermain
Enter the player id:
001
Enter the player name:
Nikita
Enter the no of matches:
3
Enter the score for match1:
80
Enter the score for match2:
85
Enter the score for match3:
90
Enter the player id:
002
Enter the player name:
Krisha
Enter the no of matches:
3
Enter the score for match1:
88
Enter the score for match2:
89
Enter the score for match3:
75
Player with higher average is: Nikita with id 1 has an average of 85

C:\Users\Nikita\Desktop\OOJ_LAB>_
```

```java
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("  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();
```

```java
        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())
```

```
        }
        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");
}
}
```

```
ENTER ID OF BOOK
001
ENTER THE TITLE OF BOOK
FamousFive
ENTER NUMBER OF PAGES OF BOOK
155
ENTER YEAR OF PUBLISHING OF THE BOOK
2010
ENTER AUTHOR OF BOOK
enid
ENTER PUBLISHER OF BOOK
blyton
ENTER PRICE OF BOOK
200
ENTER ID OF BOOK
002
ENTER THE TITLE OF BOOK
Harrypotter
ENTER NUMBER OF PAGES OF BOOK
500
ENTER YEAR OF PUBLISHING OF THE BOOK
2015
ENTER AUTHOR OF BOOK
J.KRowling
ENTER PUBLISHER OF BOOK
Pottermore
ENTER PRICE OF BOOK
600
ENTER ID OF BOOK
003
ENTER THE TITLE OF BOOK
Merchantofvenice
ENTER NUMBER OF PAGES OF BOOK
300
ENTER YEAR OF PUBLISHING OF THE BOOK
2000
ENTER AUTHOR OF BOOK
william shakespere
ENTER PUBLISHER OF BOOK
ENTER PRICE OF BOOK
500
```

```
2000
ENTER AUTHOR OF BOOK
william shakespere
ENTER PUBLISHER OF BOOK
ENTER PRICE OF BOOK
500
ENTER THE DETAILS OF THE BOOK1
 ID OF BOOK: 1  THE TITLE OF BOOK: FamousFive
 NUMBER OF PAGES OF BOOK: 155   YEAR OF PUBLISHING OF THE BOOK: 2010
 AUTHOR OF BOOK: enid    PUBLISHER OF BOOK: blyton
 PRICE OF BOOK: 200.0
ENTER THE DETAILS OF THE BOOK2
 ID OF BOOK: 2  THE TITLE OF BOOK: Harrypotter
 NUMBER OF PAGES OF BOOK: 500   YEAR OF PUBLISHING OF THE BOOK: 2015
 AUTHOR OF BOOK: J.KRowling    PUBLISHER OF BOOK: Pottermore
 PRICE OF BOOK: 600.0
ENTER THE DETAILS OF THE BOOK3
 ID OF BOOK: 3  THE TITLE OF BOOK: Merchantofvenice
 NUMBER OF PAGES OF BOOK: 300   YEAR OF PUBLISHING OF THE BOOK: 2000
 AUTHOR OF BOOK: william    PUBLISHER OF BOOK: shakespere
 PRICE OF BOOK: 500.0
THE MOST EXPENSIVE BOOK IS WITH TITLE:  Harrypotter
THE NUMBER OF BOOKS PUBLISHED IN THE YEAR 2020 = 0
THE  BOOK  WITH LEAST NUMBER OF PAGES IS BOOK 1
 ID OF BOOK: 1  THE TITLE OF BOOK: FamousFive
 NUMBER OF PAGES OF BOOK: 155   YEAR OF PUBLISHING OF THE BOOK: 2010
 AUTHOR OF BOOK: enid    PUBLISHER OF BOOK: blyton
 PRICE OF BOOK: 200.0
ENTER THE AUTHOR NAME WHOSE BOOK DETAILS NEED TO BE DISPLAYED
william shakespere
 ID OF BOOK: 1  THE TITLE OF BOOK: FamousFive
 NUMBER OF PAGES OF BOOK: 155   YEAR OF PUBLISHING OF THE BOOK: 2010
 AUTHOR OF BOOK: enid    PUBLISHER OF BOOK: blyton
 PRICE OF BOOK: 200.0

C:\Users\Nikita\Desktop\OOJ_LAB>
```