

```
D:\Java\jdk1.8.0_261\bin\prog\PlayerMain.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
BookMain.java PlayerMain.java
1 import java.util.Scanner;
2
3 class player
4 { int id;
5   String name;
6   int scores[];
7   int no_matches_played;
8
9   void player()
10  {
11    id=0;
12    name="unknown";
13    scores= new int[1];
14    scores[0]=1;
15    no_matches_played=0;
16  }
17  void getplayer()
18  { Scanner get= new Scanner(System.in);
19    System.out.println("Enter\nId:");
20    id=get.nextInt();
21    System.out.println("Name:");
22    name=get.next();
23    System.out.println("No of Matches Played:");
24    no_matches_played=get.nextInt();
25    scores= new int[no_matches_played];
26    System.out.println("Scores:");
27    for(int i=0;i<no_matches_played;i++)
28      scores[i]=get.nextInt();
29  }
30  void calcavg()
31  { int sum=0;
32    double avg;
33    if(no_matches_played>0)
34    { for(int i=0;i<no_matches_played;i++)
35      { sum=sum+scores[i];
36        avg=sum/no_matches_played;
37        System.out.println("AVERAGE SCORE: "+avg);
38      }
39    }
40  }
41
42  }
43
44  }
45
46  }
47
48  }
49
50  }
51
52  }
53
54  }
55
56  }
57
58  }
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60  }
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62  }
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64  }
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66  }
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68  }
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70  }
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72  }
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74  }
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76  }
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78  }
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80  }
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82  }
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84  }
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86  }
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88  }
89
90  }
91
92  }
93
94  }
95
96  }
97
98  }
99
100 }
```

```
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BookMain.java PlayerMain.java
25 scores= new int[no_matches_played];
26 System.out.println("Scores:");
27 for(int i=0;i<no_matches_played;i++)
28   scores[i]=get.nextInt();
29
30 void calcavg()
31 { int sum=0;
32   double avg;
33   if(no_matches_played>0)
34   { for(int i=0;i<no_matches_played;i++)
35     { sum=sum+scores[i];
36       avg=sum/no_matches_played;
37       System.out.println("AVERAGE SCORE: "+avg);
38     }
39   }
40   else
41     System.out.println("AVERAGE SCORE: 0");
42 }
43
44 void display()
45 { System.out.println("\nID: "+id);
46   System.out.println("NAME: "+name);
47   System.out.println("NO OF MATCHES: "+no_matches_played);
48   System.out.println("SCORES: ");
49   for(int i=0;i<no_matches_played;i++)
50     System.out.println(scores[i]+"\\t");
51   calcavg();
52 }
53
54 class PlayerMain
55 { public static void main(String args[])
56 { System.out.println("Enter the details of the player:\\n");
57
58   player p=new player();
59   p.getplayer();
60
61   p.display();
62 }
63 }
64
65 }
66
67 }
68
69 }
70
71 }
72
73 }
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75 }
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77 }
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79 }
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81 }
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91 }
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93 }
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95 }
96
97 }
98
99 }
100 }
```

Command Prompt

```
D:\Java\jdk1.8.0_261\bin\prog>set path="D:\Java\jdk1.8.0_261\bin"
```

```
D:\Java\jdk1.8.0_261\bin\prog>javac PlayerMain.java
```

```
D:\Java\jdk1.8.0_261\bin\prog>java PlayerMain
```

Enter the details of the player:

Enter

Id:

01

Name:

a

No of Matches Played:

3

Scores:

100

65

15

ID: 1

NAME: a

NO OF MATCHES: 3

SCORES:

100

65

15

AVERAGE SCORE: 60.0

```
D:\Java\jdk1.8.0_261\bin\prog>
```

"D:\Java\jdk1.8.0\_261\bin\prog\BookMain.java - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

```
BookMain.java PlayerMain.java
1 import java.util.Scanner;
2
3 class book
4 { int bookid, no_of_pages, year_of_pub, price;
5   String booktitle,author,publisher;
6
7   void getdetails()
8   { Scanner get=new Scanner(System.in);
9     System.out.println("ID:");
10    bookid=get.nextInt();
11    System.out.println("TITLE:");
12    booktitle=get.next();
13    System.out.println("AUTHOR:");
14    author=get.next();
15    System.out.println("PUBLISHER:");
16    publisher=get.next();
17    System.out.println("YEAR OF PUBLISHING:");
18    year_of_pub=get.nextInt();
19    System.out.println("PRICE:");
20    price=get.nextInt();
21    System.out.println("PAGES:");
22    no_of_pages=get.nextInt();
23  }
24
25  void disp()
26  { System.out.println("ID: "+bookid);
27    System.out.println("TITLE: "+booktitle);
28    System.out.println("AUTHOR: "+author);
29    System.out.println("PUBLISHER: "+publisher);
30    System.out.println("YEAR OF PUBLISHING: "+year_of_pub);
31    System.out.println("PRICE: "+price);
32    System.out.println("PAGES: "+no_of_pages);
33  }
34
35  int getid()
36  { return bookid;}
37  String getAuthor()
38  { return author; }
39  }
```

Java source file

length: 3,091 lines: 117

Ln: 82 Col: 28 Sel: 0 | 0

Windows (CR LF)

UTF-8

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08-10-2020

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*D:\Java\jdk1.8.0_261\bin\prog\BookMain.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
BookMain.java PlayerMain.java
37 { return author; }
38 int getprice()
39 {return price;}
40 int getyear()
41 { return year_of_pub;}
42 int getpages()
43 { return no_of_pages;}
44 String gettitle()
45 { return booktitle;}
46
47 }
48
49 class BookMain
50 { public static void main(String args[])
51 { Scanner get=new Scanner(System.in);
52 int n,ch;
53 System.out.println("Enter the no of books:\n");
54 n= get.nextInt();
55 book b[]=new book[n];
56 for(int i=0;i<n;i++)
57 { b[i]=new book();
58 b[i].getdetails();
59 }
60
61 do
62 { System.out.println("1. Display Book details.\n2.Find Book by Author\n3.Title of Most Expensive Book\n4.Find Book by Year\n5.Least no of Pages Book");
63 ch=get.nextInt();
64 int temp,c=-1;
65 String atemp;
66 switch(ch)
67 { case 1: int id;
68 System.out.println("Enetr id of book to be diplayed:");
69 id=get.nextInt();
70 for(int i=0;i<n;i++)
71 { temp=b[i].getId();
72 if(temp==id)
73 { b[i].disp();
74 break; }
75 }
76 case 2: String author;
77 System.out.println("Enter author of books to be diplayed:");
78 author=get.next();
79 for(int i=0;i<n;i++)
80 { atemp=b[i].getAuthor();
81 if(atemp==author)
82 { b[i].disp(); }
83 }
84 break;
85 case 3: int price=0;
86 String title;
87 for(int i=0;i<n;i++)
88 { if(price<b[i].getprice())
89 { price=b[i].getprice();
90 c=i; }
91 }
92 System.out.println(b[c].booktitle);
93 break;
94 case 4: int year;
95 System.out.println("Enetr the year of publishing:");
96 year=get.nextInt();
97 for(int i=0;i<n;i++)
98 { temp=b[i].getyear();
99 if(temp==year)
100 { b[i].disp(); }
101 }
102 break;
103 case 5: int pages=100000;
104 for(int i=0;i<n;i++)
105 { if(pages>b[i].getpages())
106 { pages=b[i].getpages();
107 c=i; }
108 }
109 System.out.println(b[c].booktitle);
110 break;
111 }
112 while(ch!=0);
113 }
```

```
*D:\Java\jdk1.8.0_261\bin\prog\BookMain.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
BookMain.java PlayerMain.java
73 { b[i].disp();
74 break;}
75 }
76 break;
77 case 2: String author;
78 System.out.println("Enter author of books to be diplayed:");
79 author=get.next();
80 for(int i=0;i<n;i++)
81 { atemp=b[i].getAuthor();
82 if(atemp==author)
83 { b[i].disp(); }
84 }
85 break;
86 case 3: int price=0;
87 String title;
88 for(int i=0;i<n;i++)
89 { if(price<b[i].getprice())
90 { price=b[i].getprice();
91 c=i; }
92 }
93 System.out.println(b[c].booktitle);
94 break;
95 case 4: int year;
96 System.out.println("Enetr the year of publishing:");
97 year=get.nextInt();
98 for(int i=0;i<n;i++)
99 { temp=b[i].getyear();
100 if(temp==year)
101 { b[i].disp(); }
102 }
103 break;
104 case 5: int pages=100000;
105 for(int i=0;i<n;i++)
106 { if(pages>b[i].getpages())
107 { pages=b[i].getpages();
108 c=i; }
109 }
110 System.out.println(b[c].booktitle);
111 break;
112 }
113 while(ch!=0);
114 }
```

```
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BookMain.java PlayerMain.java
81 { atemp=b[i].getAuthor();
82   if(atemp==author)
83   { b[i].disp(); }
84 }
85 break;
86 case 3: int price=0;
87   String title;
88   for(int i=0;i<n;i++)
89   { if(price<b[i].getprice())
90     { price=b[i].getprice();
91       c=i; }
92   }
93   System.out.println(b[c].booktitle);
94   break;
95 case 4: int year;
96   System.out.println("Enetr the year of publishing:");
97   year=get.nextInt();
98   for(int i=0;i<n;i++)
99   { temp=b[i].getyear();
100    if(temp==year)
101    { b[i].disp(); }
102  }
103  break;
104 case 5: int pages=100000;
105   for(int i=0;i<n;i++)
106   { if(pages>b[i].getpages())
107     { pages=b[i].getpages();
108       c=i; }
109   }
110   b[c].disp();
111   break;
112 default: if(ch!=6)
113   {System.out.println("Invalid Option");}
114 }
115 }while(ch!=6);
116 }
117 }
```

Java source file length: 3,091 lines: 117 Ln: 82 Col: 28 Sel: 0 | 0 Windows (CR LF) UTF-8 OVR 17:09 08-10-2020

```
Command Prompt - java BookMain
D:\Java\jdk1.8.0_261\bin\prog>java BookMain
Enter the no of books:
2
ID:
1
TITLE:
a
AUTHOR:
a
PUBLISHER:
a
YEAR OF PUBLISHING:
2000
PRICE:
2
PAGES:
23
ID:
2
TITLE:
b
AUTHOR:
b
PUBLISHER:
b
YEAR OF PUBLISHING:
2000
PRICE:
2
PAGES:
21
1. Display Book details.
```

```
Command Prompt - java BookMain
1. Display Book details.
2.Find Book by Author
3.Title of Most Expensive Book
4.Find Book by Year
5.Least no of Pages Book
6.Exit
1
Enetr id of book to be diplayed:
2
ID: 2
TITLE: b
AUTHOR: b
PUBLISHER: b
YEAR OF PUBLISHING: 2000
PRICE: 2
PAGES: 21
1. Display Book details.
2.Find Book by Author
3.Title of Most Expensive Book
4.Find Book by Year
5.Least no of Pages Book
6.Exit
2
Enter author of books to be diplayed:
b
1. Display Book details.
2.Find Book by Author
3.Title of Most Expensive Book
4.Find Book by Year
5.Least no of Pages Book
6.Exit
3
ID: 1
```

```
Command Prompt - java BookMain
1. Display Book details.
2.Find Book by Author
3.Title of Most Expensive Book
4.Find Book by Year
5.Least no of Pages Book
6.Exit
3
ID: 1
TITLE: a
AUTHOR: a
PUBLISHER: a
YEAR OF PUBLISHING: 2000
PRICE: 2
PAGES: 23
1. Display Book details.
2.Find Book by Author
3.Title of Most Expensive Book
4.Find Book by Year
5.Least no of Pages Book
6.Exit
4
Enetr the year of publishing:
2000
ID: 1
TITLE: a
AUTHOR: a
PUBLISHER: a
YEAR OF PUBLISHING: 2000
PRICE: 2
PAGES: 23
ID: 2
TITLE: b
AUTHOR: b
```