

Date:- 27 October 2020, Name:- Hritik Singh, USN:- 1BM19CS063

### Extra Programs Week - 7:-

#### Q2. Input:-

```

import java.util.Scanner;
abstract class PLAYER
{
    String name;
    int matches_played;
    double average;
}
abstract void cal_average();

class BATSMAN extends PLAYER
{
    int runs_scored;
    void get()
    {
        Scanner get = new Scanner(System.in);
        System.out.println("\n Name of batsman:");
        name = get.next();
        System.out.println(" Matches played by batsman:");
        matches_played = get.nextInt();
        System.out.println(" Total runs scored by batsman:");
        runs_scored = get.nextInt();
    }

    void cal_average()
    {
        System.out.println(" Average = runs scored / matches played");
        System.out.println(" Name of batsman: " + name);
        System.out.println(" Matches played by batsman: " + matches_played);
        System.out.println(" Total runs scored by batsman: " + runs_scored);
        System.out.println(" Average Runs scored by batsman: " + average);
    }
}

```

Date: 27 October 2020, Name: - Nitish Singh, USN: 1BM33CS068.

class BOWLER extends PLAYER.

{ int runs-given;

void getd();

{ Scanner get = new (System.in);

System.out.println ("In Name of bowler: ");

name = get.nextLine();

System.out.println (" Matches played by bowler: ");

matches-played = get.nextInt();

System.out.println (" Total runs given by bowler: ");

runs-given = get.nextInt();

}

void cal-average()

{ average = runs-given / matches-played;

System.out.println (" In Name of bowler " + name);

System.out.println (" Matches played by the bowler: " + matches-played);

System.out.println (" Total runs given by bowler: " + runs-given);

System.out.println (" Average Runs given by bowler: " + average);

}

class playerInMain

{ public static void main (String ss[])

{ Scanner get = new (System.in);

int m, n;

System.out.println (" Enter number of batsman ");

m = get.nextInt();

BATSMAN bats[] = new BATSMAN[n];

System.out.println (" Enter the no. of bowlers ");

n = get.nextInt();

BOWLER bowl[] = new BOWLER[n];

System.out.println (" Enter batsman details: \n ");

Date: 27 October 2020, Name: Gurukit Singh, USN: JBM29CS062

```

for (int i=0; i < m; i++)
{
    bats[i] = new BATSMAN();
    bats[i].get_d();
}
for (int i=0; i < m; i++)
{
    bats[i].cal_average();
}
System.out.println("Enter bowler details: \n");
    
```

```

for (int i=0; i < n; i++)
{
    bowl[i] = new BOWLER();
    bowl[i].get_d();
}
for (int i=0; i < n; i++)
{
    bowl[i].cal_average();
}
    
```

Output of the above Program:

Enter number of batsman

21

Enter the no. of bowlers

21

Enter batsman details:

Name of batsman:

Kohli

Matches played by batsman:

30

Total runs scored by batsman:

300

Date:- 27 October 2020, Name :- Sritik Singh. USN:- JBN 19CS063.

Name of batsman : Kohli

Matches played by batsman : 30

Total Runs scored by batsman : 300

Average runs scored by batsman : 10.0.

Name of bowler :

Hardik

Matches played by bowler :

34

Total runs given by bowler :

20.

Name of bowler : Hardik

Matches played by bowler : 34.

Total runs given by bowler : 20.

Average runs given by bowler : 0.0.

C:\Users\hrithi\Documents\Playermain.java - Notepad++

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txt www.java whathappenedjava practicehelloworldjava PalindromeString.c xyz.java segmentjava samsung.java book1.java Playermain.java

```
37 System.out.println("\nName of bowler:");
38 name= get.next();
39 System.out.println("Matches played by bowler:");
40 matches_played=get.nextInt();
41 System.out.println("Total runs given by bowler:");
42 runs_given=get.nextInt();
43 }
44 void cal_average()
45 {
46     average=runs_given/matches_played;
47     System.out.println("\nName of bowler: "+name);
48     System.out.println("Matches Played by bowler: "+matches_played);
49     System.out.println("Total Runs Given by bowler: "+runs_given);
50     System.out.println("Average Runs Given by bowler: "+average);
51 }
52
53 class playerInhMain
54 {
55     public static void main(String args[])
56     {
57         Scanner get=new Scanner(System.in);
58         int m,n;
59         System.out.println("Enter number of batsman");
60         m=get.nextInt();
61         BATSMan bats[]=new BATSMan[m];
62         System.out.println("Enter the no of bowlers");
63         n=get.nextInt();
64         BOWLER bowl[]=new BOWLER[n];
65         System.out.println("Enter batsman details:\n");
66         for(int i=0;i<m;i++)
67         {
68             bats[i]=new BATSMan();
69             bats[i].getd();
70         }
71         for(int i=0;i<m;i++)
72         {
73             bats[i].cal_average();
74         }
75         System.out.println("Enter bowler details:\n");
76         for(int i=0;i<n;i++)
77         {
78             bowl[i]=new BOWLER();
79             bowl[i].getd();
80         }
81         for(int i=0;i<n;i++)
82         {
83             bowl[i].cal_average();
84         }
85     }
86 }
```

Command Prompt - java playerInhMain

```
Name of batsman:  
Kohli  
Matches played by batsman:  
30  
Total runs scored by batsman:  
300  
  
Name of batsman:  
rishi  
Matches played by batsman:  
20  
Total runs scored by batsman:  
200  
  
Name of batsman: Kohli  
Matches Played by batsman: 30  
Total Runs Scored by batsman: 300  
Average Runs Scored by batsman: 10.0  
  
Name of batsman: rishi  
Matches Played by batsman: 20  
Total Runs Scored by batsman: 200  
Average Runs Scored by batsman: 10.0  
Enter bowler details;  
  
Name of bowler:
```

Java source file | length: 2,205 lines: 80 | Ln: 60 Col: 25 Sel: 0 | 0 Windows (CR LF) | UTF-8 | INS

Type here to search

The screenshot shows the Notepad++ interface with the file `Playermain.java` open. The code defines two abstract classes, `PLAYER` and `BATSMAN`, and one concrete class `BOWLER`. The `PLAYER` class has an abstract method `cal_average()`. The `BATSMAN` class implements `PLAYER` and overrides `getd()` and `cal_average()`. The `BOWLER` class also implements `PLAYER` and overrides `getd()` and `cal_average()`. The `cal_average()` method calculates the average runs scored per match.

On the right, a Command Prompt window shows the execution of the program. It prompts for the number of batsmen (2), the number of bowlers (2), and then asks for batsman details. It then prints the name of the batsman (Kohli), the matches played (30), and the total runs scored (300).

```
C:\Users\hriti>cd..  
C:\Users\hriti>cd..  
'\cd..' is not recognized as an internal or external command,  
operable program or batch file.  
C:\Users\hriti>cd..  
C:\>cd C:\Users\hriti\Documents  
C:\Users\hriti\Documents>javac Playermain.java  
C:\Users\hriti\Documents>java playerInhMain  
Enter number of batsman  
2  
Enter the no of bowlers  
2  
Enter batsman details;  
  
Name of batsman:  
Kohli  
Matches played by batsman:  
30  
Total runs scored by batsman:  
300
```

Scanned with CamScanner

C:\Users\hrithi\Documents\Playermain.java - Notepad++

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```
37 System.out.println("\nName of bowler:");
38 name= get.next();
39 System.out.println("Matches played by bowler:");
40 matches_played=get.nextInt();
41 System.out.println("Total runs given by bowler:");
42 runs_given=get.nextInt();
43 }
44 void cal_average()
45 {
46     average=runs_given/matches_played;
47     System.out.println("\nName of bowler: "+name);
48     System.out.println("Matches Played by bowler: "+matches_played);
49     System.out.println("Total Runs Given by bowler: "+runs_given);
50     System.out.println("Average Runs Given by bowler: "+average);
51 }
52
53 class playerInhMain
54 {
55     public static void main(String args[])
56     {
57         Scanner get=new Scanner(System.in);
58         int m,n;
59         System.out.println("Enter number of batsman");
60         m=get.nextInt();
61         BATSMAIN bats[] = new BATSMAIN[m];
62         System.out.println("Enter the no of bowlers");
63         n=get.nextInt();
64         BOWLER bowl[] = new BOWLER[n];
65         System.out.println("Enter batsman details;\n");
66         for(int i=0;i<m;i++)
67         {
68             bats[i]=new BATSMAIN();
69             bats[i].getd();
70         }
71         System.out.println("Enter bowler details;\n");
72         for(int i=0;i<n;i++)
73         {
74             bowl[i]=new BOWLER();
75             bowl[i].getd();
76         }
77     }
78
79 }
80
```

Command Prompt

```
Total Runs Scored by batsman: 200
Average Runs Scored by batsman: 10.0
Enter bowler details;

Name of bowler:
hardik
Matches played by bowler:
34
Total runs given by bowler:
20

Name of bowler:
hitori
Matches played by bowler:
39
Total runs given by bowler:
400

Name of bowler: hardik
Matches Played by bowler: 34
Total Runs Given by bowler: 20
Average Runs Given by bowler: 0.0

Name of bowler: hitori
Matches Played by bowler: 39
Total Runs Given by bowler: 402
Average Runs Given by bowler: 10.0

C:\Users\hrithi\Documents>
```

Java source file length : 2,205 lines : 80 Ln: 60 Col: 25 Sel: 0 | 0 Windows (CR LF) | UTF-8 | INS

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