

```

1  import java.util.Scanner;
2
3  abstract class player{
4      String name;
5      int matches_played;
6      double average;
7
8      player(String a,int b){
9          name = a;
10         matches_played = b;
11         average = 0;
12     }
13     abstract double cal_average(String p,int q,int r);
14 }
15
16 class batsman extends player{
17     int runs_scored;
18
19     double cal_average(String n,int matches,int score){
20         return (double)score/matches;
21     }
22     batsman(String a,int b,int c){
23         super(a,b);
24         runs_scored = c;
25         average = cal_average(a,b,c);
26     }
27     void display(){
28         System.out.println("Name: "+ name +" Matches played: "+ matches_played +" Runs given: "+ runs_scored +" Average: "+average);
29     }
30 }
31
32 class bowler extends player{
33     int runs_given;
34
35     double cal_average(String n,int matches,int score){
36         return (double)score/matches;
37     }
38     bowler(String a,int b,int c){
39         super(a,b);
40         runs_given = c;
41         average = cal_average(a,b,c);
42     }
43     void display(){
44         System.out.println("Name: "+ name +" Matches played: "+ matches_played +" Runs given: "+ runs_given +" Average: "+average);

```

```

45     }
46 }
47
48 class playerDemo{
49     public static void main(String[] args){
50         int m,n;
51         String name;
52         int matches,score,runs;
53         Scanner sc = new Scanner(System.in);
54         System.out.print("How many batsmen? : ");
55         m = sc.nextInt();
56         System.out.print("How many bowlers? : ");
57         n = sc.nextInt();
58
59         batsman[] bat = new batsman[m];
60         bowler[] bowl = new bowler[n];
61
62         System.out.println("\nAccepting Batsmen details: ");
63         for(int i=0;i<m;i++){
64             System.out.println("Batsman: "+(i+1));
65             System.out.print("Enter name:");
66             name = sc.next();
67             System.out.print("Enter matches played:");
68             matches = sc.nextInt();
69             System.out.print("Enter total runs scored:");
70             runs = sc.nextInt();
71             bat[i] = new batsman(name,matches,runs);
72         }
73
74         System.out.println("\nAccepting Bowler details: ");
75         for(int i=0;i<n;i++){
76             System.out.println("Bowler: "+(i+1));
77             System.out.print("Enter name:");
78             name = sc.next();
79             System.out.print("Enter matches played:");
80             matches = sc.nextInt();
81             System.out.print("Enter total runs given:");
82             runs = sc.nextInt();
83             bowl[i] = new bowler(name,matches,runs);
84         }
85         System.out.println("\nHere are your details:");
86         for(int i=0;i<m;i++){
87             System.out.println("Batsman: "+(i+1));
88             bat[i].display();
89         }
90         for(int i=0;i<n;i++){
91             System.out.println("Bowler: "+(i+1));
92             bowl[i].display();
93         }
94     }
95 }
96 }
97 }

```

Output:

Process started (PID=40056) >>>

How many batsmen? : 2

How many bowlers? : 2

Accepting Batsmen details:

Batsman: 1

Enter name:bat1

Enter matches played:45

Enter total runs scored:200

Batsman: 2

Enter name:bat2

Enter matches played:30

Enter total runs scored:500

Accepting Bowler details:

Bowler: 1

Enter name:bowl1

Enter matches played:25

Enter total runs given:600

Bowler: 2

Enter name:bowl2

Enter matches played:20

Enter total runs given:400

Here are your details:

Batsman: 1

Name: bat1 Matches played: 45 Runs given: 200 Average: 4.444444444444445

Batsman: 2

Name: bat2 Matches played: 30 Runs given: 500 Average: 16.666666666666668

Bowler: 1

Name: bowl1 Matches played: 25 Runs given: 600 Average: 24.0

Bowler: 2

Name: bowl2 Matches played: 20 Runs given: 400 Average: 20.0

<<< Process finished (PID=40056). (Exit code 0)

===== READY =====