

Develop a Java program to create a class PLAYER with member variables name, matches-played and average. This class has an abstract method cal-average (String int, int, int). Derive two classes BATSMAN from PLAYER. class BATSMAN has a member variable runs-scored. Another class BOWLER from PLAYER which has a member variable runs-given. Create m BATSMAN objects and n BOWLER objects calculate and display the average runs scored by each BATSMAN and average runs given by each BOWLER.

```
import java.util.Scanner;
abstract class Player
{
    String name;
    int matches_played;
    double average;
    abstract void cal-average (String x, int y, int z);
}
class Batman extends Player
{
    int runs_scored;
    void cal-average (String a, int b, int c)
    {
        name = a;
        matches_played = b;
        runs_scored = c;
        average = runs_scored / matches_played;
        System.out.println ("The average runs scored
        by player " + name + " is : " + average);
    }
}
```



```
class Bomber extends Player
```

```
{
```

```
    int runs-given;
```

```
    void cal-average (String p, int q, int r)
```

```
    {
```

```
        name = p;
```

```
        matches-played = q;
```

```
        average = runs-given / matches-played;
```

```
        System.out.println ("The average runs given  
by player "+ name+ " is "+ average);
```

```
    }
```

```
}
```

```
class PlayerMain
```

```
{
```

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

```
    {
```

```
        int m, n, i;
```

```
        Scanner xx = new Scanner (System.in);
```

```
        System.out.println ("Enter no. of Batsman");
```

```
        m = xx.nextInt();
```

```
        Batsman[] bt [] = new Batsman [m];
```

```
        for (i=0; i<m; i++)
```

```
        {
```

```
            bt [i] = new Batsman();
```

```
            System.out.println ("Enter details of Batsman "+  
                                (i+1)+ ":");
```

```
            System.out.println ("Enter player name:");
```

```
            bt [i].name = xx.next();
```

```
            System.out.println ("Enter no. of matches  
                                played:");
```

```
            bt [i].matches-played = xx.nextInt();
```



```

System.out.println("Enter runs scored by batsman:");
bt[i].runs_scored = xx.nextInt();

```

```

}
for(i=0; i<m; i++)
{

```

```

    bt[i].cal_average(bt[i].name, bt[i].matches_played, bt[i].runs_scored);

```

```

}

```

```

System.out.println("Enter the no. of Bowlers");
n = xx.nextInt();

```

```

Bowler bl[] = new Bowler[n];

```

```

for(i=0; i<n; i++)
{

```

```

    bl[i] = new Bowler();

```

```

    System.out.println("Enter Details of Bowler" + (i+1) + ":");

```

```

    System.out.println("Enter player name:");

```

```

    bl[i].name = xx.next();

```

```

    System.out.println("Enter no. of matches played:");

```

```

    bl[i].matches_played = xx.nextInt();

```

```

    System.out.println("Enter runs given by Bowler:");

```

```

    bl[i].runs_given = xx.nextInt();

```

```

}

```

```

for(i=0; i<n; i++)
{

```

```

    bl[i].cal_average(bl[i].name, bl[i].matches_played, bl[i].runs_given);

```

```

}

```

```

}

```