

```
import java.util.Scanner;
```

```
abstract class PLAYER{
```

```
    String name;
```

```
    int matches_played;
```

```
    double average;
```

```
    abstract void cal_average(String name,int mp,int r);
```

```
}
```

```
class BATSMAN extends PLAYER{
```

```
    int runs_scored;
```

```
    void setRuns_Scored(int runs){
```

```
        runs_scored = runs;
```

```
    }
```

```
    void cal_average(String playerName,int matchesPlayed, int runsScored){
```

```
        name = playerName;
```

```
        matches_played = matchesPlayed;
```

```
        average = (double)runsScored/matchesPlayed;
```

```
    }
```

```
}
```

```
class BOWLER extends PLAYER{
```

```
    int runs_given;
```

```
    void setRuns_Given(int runs){
```

```
        runs_given = runs;
```

```
    }
```

```
    void cal_average(String playerName,int matchesPlayed, int runsGiven ){
```

```
        name = playerName;
```

```
        matches_played = matchesPlayed;
```

```

        average = (double)runsGiven/matchesPlayed;
    }

}

public class Testj{
    public static void main(String[] args) {
        int m,n,matches_played,runs;

        String name;

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter number of batsmen: ");
        m = sc.nextInt();

        System.out.println("Enter number of bowlers: ");
        n = sc.nextInt();

        if(m <= 0 || n<=0){
            System.out.println("Enter only +ve values of m and n");
            System.exit(1);
        }

        BATSMAN batsmen[] = new BATSMAN[m];
        BOWLER bowlers[] = new BOWLER[n];

        for(int i=0;i<batsmen.length;i++){
            System.out.println("Enter name of bastman " + (i+1) + ": ");
            name = sc.next();

            System.out.println("Enter matches played of bastman " + (i+1) + ": ");
            matches_played = sc.nextInt();

            System.out.println("Enter runs scored: ");
            runs = sc.nextInt();

            batsmen[i] = new BATSMAN();

            batsmen[i].cal_average(name, matches_played, runs);
        }
    }
}

```

```

    }

    for(int i=0;i<bowlers.length;i++){

        System.out.println("Enter name of bowler " + (i+1) + ": ");

        name = sc.next();

        System.out.println("Enter matches played of bowler " + (i+1) + ": ");

        matches_played = sc.nextInt();

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

        runs = sc.nextInt();

        bowlers[i] = new BOWLER();

        bowlers[i].cal_average(name, matches_played, runs);

    }

    System.out.println("=====DETAILS OF BASTMEN=====");

    for(int i=0;i<batsmen.length;i++){

        System.out.format("%s has an average of %.2f\n",batsmen[i].name,batsmen[i].average);

    }

    System.out.println("=====DETAILS OF BOWLERS=====");

    for(int i=0;i<batsmen.length;i++){

        System.out.format("%s has an average of %.2f\n",bowlers[i].name,bowlers[i].average);

    }

}

}

```

```
Command Prompt
D:\Java programs>javac Test.java
D:\Java programs>java Testj
Enter number of batsmen:
2
Enter number of bowlers:
2
Enter name of batsman 1:
ansh
Enter matches played of batsman 1:
3
Enter runs scored:
199
Enter name of batsman 2:
vishal
Enter matches played of batsman 2:
4
Enter runs scored:
245
Enter name of bowler 1:
sahil
Enter matches played of bowler 1:
2
Enter runs given:
96
Enter name of bowler 2:
rohit
Enter matches played of bowler 2:
3
Enter runs given:
98
=====DETAILS OF BASTMEN=====
ansh has an average of 65.00
vishal has an average of 61.25
=====DETAILS OF BOWLERS=====
sahil has an average of 28.00
rohit has an average of 19.33
D:\Java programs>
```