

Visual Studio Code interface showing a Java file named `PlayerInheri.java` with the following code:

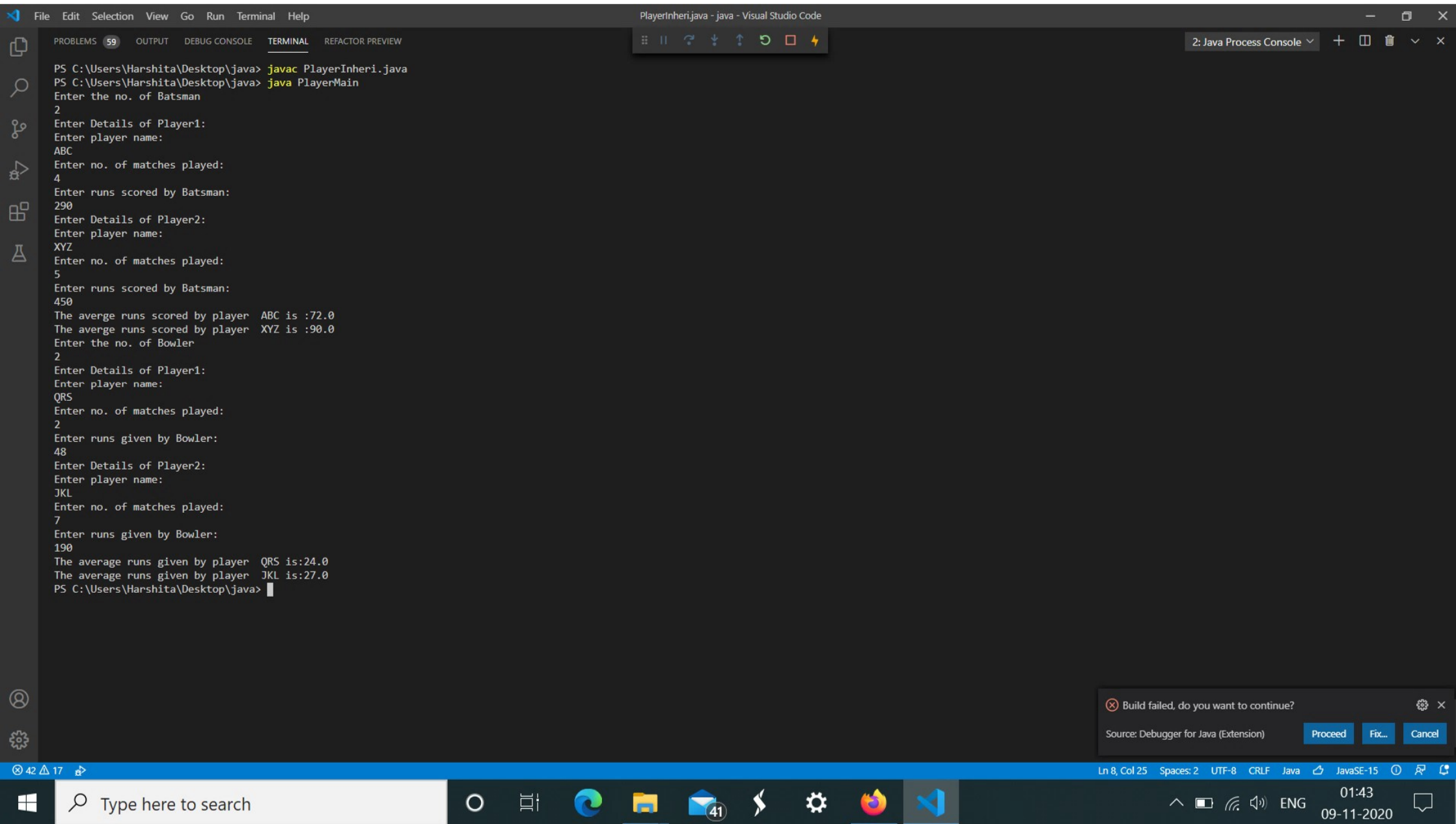
```
29 int runs_given;
30 void cal_average(String p,int q,int r)
31 {
32     name=p;
33     matches_played=q;
34     average=runs_given/matches_played;
35     System.out.println("The average runs given by player "+name+" is:"+average);
36 }
37 }
38 class PlayerMain
39 {
40     Run | Debug
41     public static void main(String args[])
42     {
43         int m,n,i;
44         Scanner xx=new Scanner(System.in);
45         System.out.println("Enter the no. of Batsman");
46         m=xx.nextInt();
47         Batsman bt[]=new Batsman[m];
48         for(i=0;i<m;i++)
49         {
50             bt[i]=new Batsman();
51             System.out.println("Enter Details of Player"+(i+1)+ ":");
52             System.out.println("Enter player name:");
53             bt[i].name=xx.next();
54             System.out.println("Enter no. of matches played:");
55             bt[i].matches_played=xx.nextInt();
56             System.out.println("Enter runs scored by Batsman:");
57             bt[i].runs_scored=xx.nextInt();
58         }
59         for(i=0;i<m;i++)
60         {
61             bt[i].cal_average(bt[i].name ,bt[i].matches_played,bt[i].runs_scored);
62         }
63         System.out.println("Enter the no. of Bowler");
64         n=xx.nextInt();
```

The bottom status bar shows: Ln 6, Col 57 | Spaces: 2 | UTF-8 | CRLF | Java | JavaSE-15 | 01:39 | 09-11-2020

Visual Studio Code interface showing a Java file named `PlayerInheri.java` with the following code:

```
53     System.out.println("Enter no. of matches played:");
54     bt[i].matches_played=xx.nextInt();
55     System.out.println("Enter runs scored by Batsman:");
56     bt[i].runs_scored=xx.nextInt();
57 }
58 for(i=0;i<m;i++)
59 {
60     bt[i].cal_average(bt[i].name ,bt[i].matches_played,bt[i].runs_scored);
61 }
62 System.out.println("Enter the no. of Bowler");
63 n=xx.nextInt();
64 Bowler bl[]=new Bowler[n];
65 for(i=0;i<n;i++)
66 {
67     bl[i]=new Bowler();
68     System.out.println("Enter Details of Player"+(i+1)+ ":");
69     System.out.println("Enter player name:");
70     bl[i].name=xx.next();
71     System.out.println("Enter no. of matches played:");
72     bl[i].matches_played=xx.nextInt();
73     System.out.println("Enter runs given by Bowler:");
74     bl[i].runs_given=xx.nextInt();
75 }
76 for(i=0;i<n;i++)
77 {
78     bl[i].cal_average(bl[i].name ,bl[i].matches_played,bt[i].runs_given);
79 }
80 }
81 }
82 }
```

The bottom status bar indicates: Ln 6, Col 57 | Spaces: 2 | UTF-8 | CRLF | Java | JavaSE-15 | 01:39 | 09-11-2020.



FileEditSelectionViewGoRunTerminalHelp

SGPAInher.java × PlayerInheri.java

SGPAInher.java > Student

```
1  /*Develop a Java program to create a class Student whose variables are usn, name and sem.
2  Derive a class Test from Student to include an array of cie marks of each course and their
3  corresponding credits in another array. Derive a class Exam from Test which includes an
4  array of see marks. Derive a class Result which calculates the grade for each course and the
5  SGPA. Create n student objects and displays all the above details.*/
6
7  import java.util.*;
8  import java.lang.String;
9  class Student
10 {
11     String usn,name;
12     int sem;
13     void accept(String u,String n,int s)
14     {
15         usn=u;
16         name=n;
17         sem=s;
18     }
19 }
20 class Test extends Student
21 {
22     int cie[],credits[];
23     void accept_cie(int n)
24     {
25         Scanner ss=new Scanner(System.in);
26         cie=new int[n];
27         credits=new int[n];
28         for(int i=0;i<n;i++)
29         {
30             System.out.println("Enter cie marks with credits of course"+(i+1));
31             cie[i]=ss.nextInt();
32             credits[i]=ss.nextInt();
33         }
34 }
```

Ln 9, Col 14 Spaces: 4 UTF-8 CRLF Java JavaSE-15

42 17

Build failed, do you want to continue?
Source: Debugger for Java (Extension)
Proceed Fix... Cancel

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SGPAInher.java × PlayerInheri.java

SGPAInher.java > Student

```
31  cie[i]=ss.nextInt();
32  credits[i]=ss.nextInt();
33  }
34  }
35  }
36  class Exam extends Test
37  {
38      int see[];
39      void accept_see(int n)
40      {
41          Scanner ss=new Scanner(System.in);
42          see=new int[n];
43          for(int i=0;i<n;i++)
44          {
45              System.out.println("enter see marks of course"+(i+1));
46              see[i]=ss.nextInt();
47          }
48      }
49  }
50  class Result extends Exam
51  {
52      float sgpa;
53      void sgpa_cal(int n)
54      {
55          int sum=0,c=0;
56          int gp=0;
57          int tot;
58          for(int i=0;i<n;i++)
59          {
60              tot=cie[i]+see[i]/2;
61              if(tot>=90)
62                  gp=10;
63              else if(tot>=80)
64                  gp=9;
```

Ln 9, Col 14 Spaces: 4 UTF-8 CRLF Java JavaSE-15

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SGPAInher.java x PlayerInheri.java

SGPAInher.java > Student

```
55     int sum=0,c=0;
56     int gp=0;
57     int tot;
58     for(int i=0;i<n;i++)
59     {
60         tot=cie[i]+see[i]/2;
61         if(tot>=90)
62             gp=10;
63         else if(tot>=80)
64             gp=9;
65         else if(tot>=70)
66             gp=8;
67         else if(tot>=60)
68             gp=7;
69         else if(tot>=50)
70             gp=6;
71         else if(tot>=40)
72             gp=4;
73         else
74             gp=0;
75         sum=sum+gp*credits[i];
76         c=c+credits[i];
77     }
78     sgpa=(float)sum/c;
79 }
80 void display()
81 {
82     System.out.println("*Student Details*");
83     System.out.println("Student USN: "+usn);
84     System.out.println("Student Name: "+name);
85     System.out.println("Student Sem: "+sem);
86     System.out.println("Student sgpa: "+sgpa);
87 }
```

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SGPAInher.java - java - Visual Studio Code

SGPAInher.java x PlayerInheri.java

SGPAInher.java > Student

```
87
88 }
89 }
90 class Main
91 {
92     public static void main(String args[])
93     {
94         Scanner xx=new Scanner(System.in);
95         System.out.println("Enter no of students");
96         int n=xx.nextInt();
97         Result []r=new Result[n];
98         String u,nam;
99         int s;
100         for(int i=0;i<n;i++)
101         {
102             System.out.println("Enter details of student "+(i+1));
103             System.out.println("Enter usn: ");
104             u=xx.next();
105             System.out.println("Enter name: ");
106             nam=xx.next();
107             System.out.println("Enter sem ");
108             s=xx.nextInt();
109             System.out.println("Enter no of courses");
110             int courses=xx.nextInt();
111             r[i]=new Result();
112             r[i].accept(u,nam,s);
113             r[i].accept_cie(courses);
114             r[i].accept_see(courses);
115             r[i].sgpa_cal(courses);
116         }
117         for(int i=0;i<n;i++)
118         {
119             r[i].display();
120         }
121     }
122 }
```

Build failed, do you want to continue?

Source: Debugger for Java (Extension)

Proceed Fix... Cancel

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SGPAInher.java - java - Visual Studio Code

SGPAInher.java x PlayerInheri.java

SGPAInher.java > Student

```
92 public static void main(String args[])
93 {
94     Scanner xx=new Scanner(System.in);
95     System.out.println("Enter no of students");
96     int n=xx.nextInt();
97     Result []r=new Result[n];
98     String u,nam;
99     int s;
100     for(int i=0;i<n;i++)
101     {
102         System.out.println("Enter details of student "+(i+1));
103         System.out.println("Enter usn: ");
104         u=xx.next();
105         System.out.println("Enter name: ");
106         nam=xx.next();
107         System.out.println("Enter sem ");
108         s=xx.nextInt();
109         System.out.println("Enter no of courses");
110         int courses=xx.nextInt();
111         r[i]=new Result();
112         r[i].accept(u,nam,s);
113         r[i].accept_cie(courses);
114         r[i].accept_see(courses);
115         r[i].sgpa_cal(courses);
116     }
117     for(int i=0;i<n;i++)
118     {
119         r[i].display();
120     }
121 }
122 }
```

Build failed, do you want to continue?

Source: Debugger for Java (Extension)

Proceed Fix... Cancel

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SGPAInher.java - java - Visual Studio Code

2: Java Process Console

```
PS C:\Users\Harshita\Desktop\java> javac SGPAInher.java
PS C:\Users\Harshita\Desktop\java> java Main
Enter no of students
2
Enter details of student 1
Enter usn:
1BM19Cs001
Enter name:
XYZ
Enter sem
3
Enter no of courses
5
Enter cie marks with credits of course1
40 3
Enter cie marks with credits of course2
47 2
Enter cie marks with credits of course3
40 2
Enter cie marks with credits of course4
38 4
Enter cie marks with credits of course5
35 3
enter see marks of course1
80
enter see marks of course2
70
enter see marks of course3
85
enter see marks of course4
90
enter see marks of course5
79
Enter details of student 2
Enter usn:
1BM19CS002
Enter name:
ABC
Enter sem
3
Enter no of courses
4
Enter cie marks with credits of course1
40 3
Enter cie marks with credits of course2
44 2
Enter cie marks with credits of course3
33 4
Enter cie marks with credits of course4
38 2
enter see marks of course1
```

Ln 83, Col 49 Spaces: 4 UTF-8 CRLF Java JavaSE-15

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SGPAInher.java - java - Visual Studio Code

2: Java Process Console

```
enter see marks of course3
85
enter see marks of course4
90
enter see marks of course5
79
Enter details of student 2
Enter usn:
1BM19CS002
Enter name:
ABC
Enter sem
3
Enter no of courses
4
Enter cie marks with credits of course1
40 3
Enter cie marks with credits of course2
44 2
Enter cie marks with credits of course3
33 4
Enter cie marks with credits of course4
38 2
enter see marks of course1
87
enter see marks of course2
76
enter see marks of course3
90
enter see marks of course4
93
*Student Details*
Student USN: 1BM19Cs001
Student Name: XYZ
Student Sem: 3
Student sgpa: 8.785714
*Student Details*
Student USN: 1BM19CS002
Student Name: ABC
Student Sem: 3
Student sgpa: 8.636364
PS C:\Users\Harshita\Desktop\java>
```

Ln 83, Col 49 Spaces: 4 UTF-8 CRLF Java JavaSE-15

42 17

Type here to search

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