

## src\Problem1.java

```
1  /*
2  Name: Hunter Poole
3  Date: 2/18/25
4  HW #: 4
5  Problem #: 1
6  Source Code: Problem1.java
7  Action: For the grade and credit hours of two classes, provides a GPA and a status message.
8  */
9
10 import java.util.Scanner;
11
12 public class Problem1 {
13     public static void main(String[] args)
14     {
15         final float A = 4.0f, B = 3.0f, C = 2.0f, D = 1.0f, F = 0.0f;
16         float Grade1_Float = F, Grade2_Float = F, GPA = 0.0f;
17         String Grade1_String = "F", Grade2_String = "F";
18         int Credits1 = 0, Credits2 = 0;
19
20         Scanner Input1 = new Scanner(System.in);
21         System.out.print("Enter letter grade for first class --> ");
22         Grade1_String = Input1.next();
23
24         Scanner Input2 = new Scanner(System.in);
25         System.out.print("Enter number of credit hours for first class --> ");
26         Credits1 = Input2.nextInt();
27
28         System.out.println();
29
30         Scanner Input3 = new Scanner(System.in);
31         System.out.print("Enter letter grade for second class --> ");
32         Grade2_String = Input3.next();
33
34         Scanner Input4 = new Scanner(System.in);
35         System.out.print("Enter number of credit hours for second class --> ");
36         Credits2 = Input4.nextInt();
37
38         System.out.println();
39
40         switch (Grade1_String)
41         {
42             case "A":
43                 Grade1_Float = A;
44                 break;
45             case "B":
46                 Grade1_Float = B;
47                 break;
```

```
48         case "C":
49             Grade1_Float = C;
50             break;
51         case "D":
52             Grade1_Float = D;
53             break;
54         case "F":
55             Grade1_Float = F;
56             break;
57     }
58
59     switch (Grade2_String)
60     {
61         case "A":
62             Grade2_Float = A;
63             break;
64         case "B":
65             Grade2_Float = B;
66             break;
67         case "C":
68             Grade2_Float = C;
69             break;
70         case "D":
71             Grade2_Float = D;
72             break;
73         case "F":
74             Grade2_Float = F;
75             break;
76     }
77
78     GPA = ((Grade1_Float * Credits1) + (Grade2_Float * Credits2)) / (Credits1 +
Credits2);
79
80     System.out.printf("%s %3d %n", Grade1_String, Credits1);
81     System.out.printf("%s %3d %n", Grade2_String, Credits2);
82     System.out.printf("%s %.5f %n", "Your GPA = ", GPA);
83
84     if (GPA >= 3.5)
85     {
86         System.out.print("Congratulations, doing good");
87     }
88
89     if (GPA < 2.0)
90     {
91         System.out.print("You are doing poorly");
92     }
93 }
94 }
95
```

```
96  /*
97  Enter letter grade for first class --> B
98  Enter number of credit hours for first class --> 3
99
100 Enter letter grade for second class --> C
101 Enter number of credit hours for second class --> 4
102
103 B    3
104 C    4
105 Your GPA = 2.42857
106
107 Enter letter grade for first class --> B
108 Enter number of credit hours for first class --> 3
109
110 Enter letter grade for second class --> A
111 Enter number of credit hours for second class --> 4
112
113 B    3
114 A    4
115 Your GPA = 3.57143
116 Congratulations, doing good
117
118 Enter letter grade for first class --> D
119 Enter number of credit hours for first class --> 3
120
121 Enter letter grade for second class --> C
122 Enter number of credit hours for second class --> 3
123
124 D    3
125 C    3
126 Your GPA = 1.50000
127 You are doing poorly
128
129 Enter letter grade for first class --> A
130 Enter number of credit hours for first class --> 5
131
132 Enter letter grade for second class --> F
133 Enter number of credit hours for second class --> 3
134
135 A    5
136 F    3
137 Your GPA = 2.50000
138 */
```