

src\Problem1.java

```
1  /*
2  Name: Hunter Poole
3  Date: 2/20/25
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 Input = new Scanner(System.in);
21         System.out.print("Enter letter grade for first class --> ");
22         Grade1_String = Input.next();
23
24         System.out.print("Enter number of credit hours for first class --> ");
25         Credits1 = Input.nextInt();
26
27         System.out.println();
28
29         System.out.print("Enter letter grade for second class --> ");
30         Grade2_String = Input.next();
31
32         System.out.print("Enter number of credit hours for second class --> ");
33         Credits2 = Input.nextInt();
34
35         System.out.println();
36
37         switch (Grade1_String)
38         {
39             case "A":
40                 Grade1_Float = A;
41                 break;
42             case "B":
43                 Grade1_Float = B;
44                 break;
45             case "C":
46                 Grade1_Float = C;
47                 break;
```

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

```
96
97 Enter letter grade for second class --> C
98 Enter number of credit hours for second class --> 4
99
100 B   3
101 C   4
102 Your GPA = 2.42857
103
104 Enter letter grade for first class --> B
105 Enter number of credit hours for first class --> 3
106
107 Enter letter grade for second class --> A
108 Enter number of credit hours for second class --> 4
109
110 B   3
111 A   4
112 Your GPA = 3.57143
113 Congratulations, doing good
114
115 Enter letter grade for first class --> D
116 Enter number of credit hours for first class --> 3
117
118 Enter letter grade for second class --> C
119 Enter number of credit hours for second class --> 3
120
121 D   3
122 C   3
123 Your GPA = 1.50000
124 You are doing poorly
125
126     // Additional cases //
127     // Test for F, not included above //
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 */
```