

Hunter Poole
CSCI 155 HW4, Problem 1

Problem recap skipped due to length of problem.

Three Step Analysis:

- A. From the letter grades of two classes and their associated credit hours, provide a GPA and a status message for the student if $GPA < 2.0$ or $GPA > 3.5$.
- a. Use $GPA = \text{Total Points} / \text{Total Number of Credits}$
 - b. Letter grades of following value:
 - i. A = 4.0, B = 3.0, C = 2.0, D = 1.0, F = 0.0

INPUT	OUTPUT	EQUATIONS
Grade 1	[Grade 1] [Credits 1]	switch (Grade1) case A: Grade1 = 4.0; break; case B: Grade1 = 3.0; break; [ETC down to F (0.0)]
Credits 1	[Grade 2] [Credits 2]	switch (Grade2) case A: Grade2 = 4.0; break; case B: Grade2 = 3.0; break; [ETC...]
Grade 2	Your GPA = [GPA]	$GPA = ((\text{Grade1} * \text{Credits1}) + (\text{Grade2} * \text{Credits2})) / (\text{Credits1} + \text{Credits2})$
Credits 2	"You are doing poorly" "Congratulations, doing good"	if (GPA >= 3.5) write "Congratulations, doing good" end if
		if (GPA < 2.5) write "You are doing poorly" end if

- B. Limits / Constraints:
- a. Output must match example.
 - b. GPA Should be an have format: 1.23456

Hunter Poole
CSCI 155 HW4, Problem 1

final A = 4.0, B = 3.0, C = 2.0, D = 1.0, F = 0.0

write "Enter letter grade for first class --> "
read Grade1

write "Enter number of credit hours for first class --> "
read Credits1

write "Enter letter grade for second class --> "
read Grade2

write "Enter number of credit hours for second class --> "
read Credits2

switch (Grade1)
 case "A":
 Grade1 = A;
 break;
 case "B":
 Grade1 = B;
 break;
 case "C":
 Grade1 = C;
 break;
 case "D":
 Grade1 = D;
 break;
 case "F":
 Grade1 = F;
 break;
end switch

switch (Grade2)
 case "A":
 Grade2 = A;
 break;
 case "B":
 Grade2 = B;
 break;
 case "C":
 Grade2 = C;
 break;
 case "D":
 Grade2 = D;

Hunter Poole
CSCI 155 HW4, Problem 1

```
        break;
    case "F":
        Grade2 = F;
        break;
end switch

GPA = ((Grade1 * Credits1) + (Grade2 * Credits2)) / (Credits1 + Credits2)

write Grade1, Credits1
write Grade2, Credits2
write "Your GPA= " + GPA

if (GPA >= 3.5)
    write "Congratulations, doing good"
end if

if (GPA < 2.5)
    write "You are doing poorly"
end if
```