**Mat188: Lab 10**

Micah has CGPA of 2.5, and 3 C+’s or better, so he is eligible for all of the scholarship, orange scholarship, yellow scholarship and blue scholarship.

Chirag has CGPA of 2.14, and 2 C+’s or better, so he is eligible for only Orange scholarship.

Solving process:

The problem can be solved by using several conditional statement repetitively. By analyzing every score of each subject the student gets, it is easily to find the GPA of each course and its letter grade. In the process of finding the GPA and letter grade of each course, I add the GPA to the total GPA and add one to the number of C+’s or better. After analyzing each subjects, I get the total GPA and total number of the subjects which has a letter grade C+’s or better.

Appendix: The related code to the problem

grades = [62 52 71 80 83]; % Grades of Micah

%grades = [82 55 60 56 79]; % Grades of Chirag

c\_p = 0;

CGPA = 0;

a = 1;

for i = 1 : length(grades)

if grades(i) >= 85

CGPA = CGPA + 4.0;

c\_p = c\_p + 1;

elseif grades(i) >= 80

CGPA = CGPA + 3.7;

c\_p = c\_p + 1;

elseif grades(i) >= 77

CGPA = CGPA + 3.3;

c\_p = c\_p + 1;

elseif grades(i) >= 73

CGPA = CGPA + 3.0;

c\_p = c\_p + 1;

elseif grades(i) >= 70

CGPA = CGPA + 2.7;

c\_p = c\_p + 1;

elseif grades(i) >= 67

CGPA = CGPA + 2.3;

c\_p = c\_p + 1;

elseif grades(i) >= 63

CGPA = CGPA + 2.0;

elseif grades(i) >= 60

CGPA = CGPA + 1.7;

elseif grades(i) >= 57

CGPA = CGPA + 1.3;

elseif grades(i) >= 53

CGPA = CGPA + 1.0;

elseif grades(i) >= 50

CGPA = CGPA + 0.7;

end

a = a + 1;

end

CGPA / 5

c\_p