## HW1 - If/Switch

Ask the user if they are taking a class (enter y, Y, n or N). If they are not taking a class print "Thanks for using the system." and close the program. If they are taking a class proceed to ask for a grade as listed below. If the input is any character other than Y, y, N or n print "Invalid input" and close. This should work regardless of capital or lowercase inputs. **Use if** / else if / else for this part.

If and only if the user is taking a class, ask them to enter a letter grade (A, B, C, D, or F, uppercase or lowercase). If they enter uppercase or lowercase A or B, print "Great Job!" If they enter uppercase or lowercase C print "You're doing alright." If they enter uppercase or lowercase D or F print "You can improve." If they enter anything else then print "Invalid grade." Regardless of input then close (including invalid). **Use a switch statement for this portion.** Hint: remember cases can spill through until a break and remember the default case. This should ONLY run if the user is taking a class! (Remember nesting).

Submit your code, flowchart or algorithm and screenshots of your program being thoroughly tested via repl.it Teams by the deadline.

## **Test Cases**

Please run ALL of the following test cases (nine test cases) and include screenshots of each in your repl. You may also include additional test cases of your choice if you would like. Data in <angle brackets> is user input. Your code must have a comment header at the top or a separate file with a description of your algorithm (The plan your code follows to solve the problem) or a flowchart uploaded (.draw file or image file) that illustrates your algorithm.

Test Case 1:

Are you taking a class?: <N>
Thank you for using the system.

Test Case 2:

Are you taking a class?: <n>

Thank you for using the system.

Test Case 3:

Are you taking a class?: <Z> Invalid Input.

Test Case 4:

Are you taking a class?: <y>

Please enter a grade: <a>

Great Job!

Test Case 5:

Are you taking a class?: <Y>

Please enter a grade: <B>

**Great Job!** 

Test Case 6:

Are you taking a class?: <Y>

Please enter a grade: <C>

You're doing alright.

Test Case 7:

Are you taking a class?: <Y>

Please enter a grade: <D>

You can improve.

Test Case 8:

Are you taking a class?: <Y>

Please enter a grade: <F>

You can improve.

Test Case 9:

Are you taking a class?: <Y>

Please enter a grade: <X>

Invalid grade.