

## Week 3 - conditional structure

### Program #1

Filename: wk3a\_grade.cpp

Obejctive: Demonstrate use of an if/else if/else structure to determine a letter grade, based on a percentage.

Specification: Write a program to show a student's letter grade in a course. The user will input the percent earned in the class (i.e., 98, 84) and output will show a letter grade. Letter grades are determined according to the following scale:

90 and above	A
80-89	B
70-79	C
60-69	D
below 60	F

There should be an error messages that appears to the user, if the user inputs a value greater than 100 or less than 0.

In the comments section at the top of your program, include a list of the test data you used to determine if the program works correctly.

```
Enter the percentage you earned in the class,  
as a whole number (90 for ninety percent, etc.):  
87  
  
The grade you earned is: B  
  
Process returned 0 (0x0)   execution time : 2.594 s  
Press any key to continue.
```

NOTE: Be sure that the if/else structure ONLY assigns the letter grade. It should NOT have any output.

## Program #2

Filename: wk3a\_sortWords.cpp

Obejctive: Demonstrate use of an if/else if/else structure to sort 3 words entered by the user into alphabetical order.

Specification: Write a program that asks the user to enter three words. The program should sort and display the words in alphabetical order.

Hint: You will need to set up variables to hold the 3 words (as strings) and use relational operators to compare them, just as you would compare numbers. Also, you will need to use Boolean operators so you can compare all 3 words in one conditional statement.

Be sure to test your program with words in all possible orderings.

SAMPLE RUN:

```
Enter three words, pressing Enter after each:
horse
cat
frog

Those words, in alphabetical order, are:
cat
frog
horse

Process returned 0 (0x0)   execution time : 4.942 s
Press any key to continue.
```