

CS 215 – Fall 2018

Lab 2

Learning Objectives:

- More practice with user input/output, including string input.
- Use of if/else, possibly nested, to solve simple problems.

General Description:

1. Write a program that asks the user to enter 3 numbers, one at a time. Print the three numbers in sorted order. [Note: no need to use an array or similar structure!] Examples (user input in blue):

Enter number 1: 45	Enter number 1: 55
Enter number 2: 35	Enter number 2: 45
Enter number 3: 55	Enter number 3: 35
Sorted they are 35 45 55	Sorted they are 35 45 55

2. In the same program:
Write code that will display the following menu:
A. Aleppo Pepper
B. Banana Pepper
C. Cayenne Pepper
D. Dragons Breath
Enter a letter to choose a pepper:

Calculate the Scoville Units (measure of hotness):

Aleppo = 30,000

Banana = 1,000

Cayenne = 40,000

Dragon's Breath = 2,480,000

Print the Scoville Units for the chosen pepper, example:

That's 1000 Scovilles of heat!

The program should handle *both* upper and lower case entries...that is 'A' or 'a' should print the Scoville Units for the Aleppo.

The program should print "That pepper is not on the list" when the user enters anything besides A, B, C, D (or a,b,c,d). You may assume the user will not enter blanks in their answer, but they may enter more than one character.

As always, the program should end with a pause.

Sample Executions:

<pre>C:\Users\Kevin\Documents\HTML\cs215\labs\lab2\sc Enter number 1: 55 Enter number 2: 35 Enter number 3: 45 Sorted they are 35 45 55 A.Aleppo Pepper B.Banana Pepper C.Cayenne Pepper D.Dragons Breath Enter a letter to choose a pepper : b That's 1000 Scovilles of heat! Press any key to continue . . . _</pre>	<pre>C:\Users\Kevin\Documents\HTML\cs215\labs\lab2\sc Enter number 1: 55 Enter number 2: 45 Enter number 3: 35 Sorted they are 35 45 55 A.Aleppo Pepper B.Banana Pepper C.Cayenne Pepper D.Dragons Breath Enter a letter to choose a pepper : D That's 2480000 Scovilles of heat! Press any key to continue . . . _</pre>
<pre>C:\Users\Kevin\Documents\HTML\cs215\labs\lab2\soln\De Enter number 1: 23 Enter number 2: 45 Enter number 3: 23 Sorted they are 23 23 45 A.Aleppo Pepper B.Banana Pepper C.Cayenne Pepper D.Dragons Breath Enter a letter to choose a pepper : alepo That pepper is not on the list Press any key to continue . . . _</pre>	<pre>C:\Users\Kevin\Documents\HTML\cs215\labs\lab2\sol Enter number 1: 12 Enter number 2: -3 Enter number 3: 6 Sorted they are -3 6 12 A.Aleppo Pepper B.Banana Pepper C.Cayenne Pepper D.Dragons Breath Enter a letter to choose a pepper : e That pepper is not on the list Press any key to continue . . . _</pre>

Grading Rubric:

Style: standard comment box at the top

Style: all statements are properly indented

Style: meaningful variable names are used (one-letter names OK for "generic numbers")

Program asks for three numbers as shown (inputs line up, and space after colon)

Program correctly sorts the numbers: NO ARRAY SHOULD BE USED!

Program correctly prints the sorted numbers as described.

Program prints the pepper menu as shown.

Program allows the user to enter their choice, one or more characters with no space

Program correctly calculates scoville units.

Program prints scoville units in message as shown, or, prints the error message as shown (not both)