

# Python For Beginners

## Lab Exercise 5

There is an algorithm that is used to sort a list of numeric values in their ascending order, which is called Bubble Sort.

The way this algorithm works, is that it compares two values at a time, to see which value is larger. If the value on the left is larger then it will swap the two around. And after looping throughout the process it will have ordered the numbers properly. This starts from the left and travels right, once it reaches the end, it starts again.

This process should be repeated until there is one complete pass through the set of numbers without any changes. Which means that the numbers are in the right order. Or until you have looped through  $N - 1$  times, which is the maximum number of times needed.  $N$  is the number of numbers provided in the set.

For this lab rearrange this number list using Bubble Sort:

8, 7, 12, 4, 9, 6, and 5

Hint: There will be needs for nested loops here, so be careful with indenting.

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