Compute but do not run how long BubbleSort would take for 500,000 numbers:

Numbers5.txt has 60,000 values.

This method is exponentially faster than the indexing method I used last.

1) user time on file Numers5.txt

   My user time using QuickSort was 0.515 seconds.

2) Computed time for 500,000 numbers for QuickSort and for BubbleSort

   The formula for time to sort in BubbleSort is O(n^2). The user time to sort Numbers5.txt is 15.656. In order to find the time for 500,000 numbers, use the formula n2 = 8.333n1. once n1 is squared, we get 69.444. This means that the time used to sort the file would be 1,087 seconds. QuickSort would only take 5.119 seconds instead.

3) user time on file Numbers6.txt for QuickSort only

   My real time to run the file was 4.125 seconds.