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Iterations and Recursions:

This program was created in Visual Studios environment. The programming language is c++. This code may produce stack overflow error as I had to adjust my IDE to run. For pretest of code launch .cpp file into this IDE:

<https://www.programiz.com/cpp-programming/online-compiler/>

In order to create the program in this reflection; I used the heap sort algorithm to sort the random integers of data. The heap sort function would sort an array of integers when called. The iteration and recursion function would use that same sorted array and display results for each data size. This process would loop 5 times before displaying the average `CLOCKS_PER_SECOND` time for each data size. Here is My chart Created: The total output was saved to txt file and imported to excel to create the data chart.

0.2 0.4 0.6 0.8 1 1000 4000 8000 10000 40000 80000 100000 400000 800000
1000

