Sorting algorithms are the foundation of numerous computer programs and applications used by people and companies all over the world, and are especially important when dealing with big data. 25% - 50% of all the work performed by computers require sorting data. Several sorting algorithms have been created over time to provide better run time performances. Some of these sorting algorithms have stood out like merge sort and bucket sort for their superior performance. However, there are two key features of every sorting algorithm that increase their time and space complexities - a) highly iterative processes requiring intense data churning and b) large memory to execute these iterative processes. As a result, sorting algorithms put severe stress on system resources. This research shall explore the possibility of using statistical distribution type and the integration technique to separate the data into almost evenly distributed groups, which can be sorted separately and then concatenated together to provide a final sorted list. Sorting in smaller groups will significantly reduce the usage of system resources as well as result in faster performance. Furthermore, the number of passes needed to be made in this algorithm will be significantly less than those of current sorting algorithms (about an average of 3 passes as opposed to n number of passes where n is the number of elements). Developing a faster sorting algorithm will have a snowball effect of improving other computer algorithms.