

Quick Sort – Ascending Initialization

- The 11 data points indicate an $O(n \log_2 n)$ relationship between list length and sorting time. The relation between length of list and time can be modeled by $n \cdot \log_2(n) / 660939165.693$
- Prediction for the time required for Quick Sort to sort an ascending (pre-sorted) list of length 10,000,000,000: $y(10000000000) = 502.61$ seconds or 8.38 minutes

