

Bubble Sort – Random Initialization

- The 11 data points indicate an $O(n^2)$ relationship between list length and sorting time. The quadratic trendline fits the data with an R^2 value of .9999.
- Prediction for the time required for Insertion Sort to sort a randomly initialized list of length 10,000,000: $y(10000000)=99970.2137$ seconds or 27.77 hours

