

## Selection Sort – Ascending 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 .9979.
- Prediction for the time required for Selection Sort to sort an ascending (pre-sorted) list of length 10,000,000:  $y(10000000)=59994.8715$  seconds or 16.67 hours

