

## Selection 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 .9983.
- Prediction for the time required for Selection Sort to sort a randomly initialized list of length 10,000,000:  $y(10000000)=101007.8059$  seconds or 28.05

