

```
In[5]:= (* processing selection sort times *)
data =
  Import["/Users/john/structures/assignment2/csv_outputs/linear.csv", "CSV"];
wordCounts = data[[All, 1]];
comparisons = data[[All, 2]];
swaps = data[[All, 3]];
times = data[[All, 4]];

"
```

In[14]:=

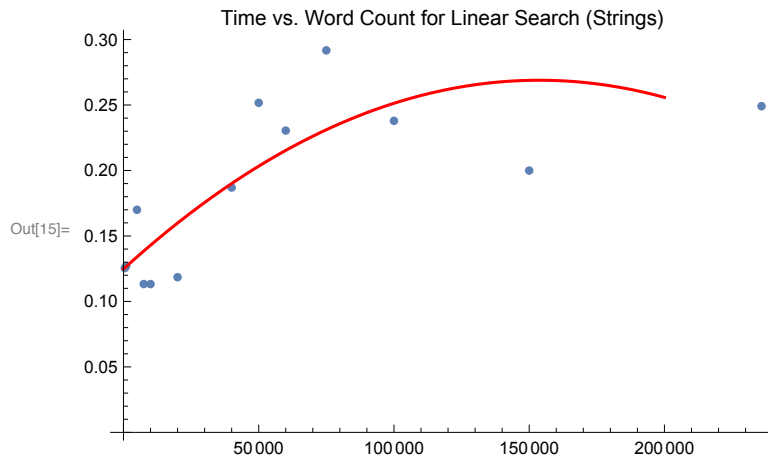
```
time[words_] = Fit[Transpose[{wordCounts, times}], {1, words, words^2}, words]
```

```
Show[ListPlot[Transpose[{wordCounts, times}]]],  
Plot[time[words], {words, 0, 200 000}, PlotStyle -> Red],  
PlotLabel -> "Time vs. Word Count for Linear Search (Strings)"]
```

```
comparisons[words_] =  
Fit[Transpose[{wordCounts, comparisons}], {1, words}, words]
```

```
Show[ListPlot[Transpose[{wordCounts, comparisons}]]],  
Plot[comparisons[words], {words, 0, 200 000}, PlotStyle -> Red],  
PlotLabel -> "Comparisons vs. Word Count for Linear Search (Strings)"]
```

Out[14]= $0.124765 + 1.87601 \times 10^{-6} \text{ words} - 6.10365 \times 10^{-12} \text{ words}^2$



```
Set::write : Tag List in  
{8718, 120463, 1536458, 2392228, 260969, 3914910, 561860, 3858, 55237, 718243, 877144, 87195, 1121154}[words_] is Protected. >>
```

Out[16]= $-62\,209.2 + 16.5153 \text{ words}$

