

```

In[39]:= (* processing selection sort times *)
data = Import["/Users/john/structures/assignment2/selection.csv", "CSV"];
wordCounts = data[[All, 1]];
comparisons = data[[All, 2]];
swaps = data[[All, 3]];
times = data[[All, 4]];

```

In[74]:=

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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 Selection Sort (Strings)"]

```

```

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

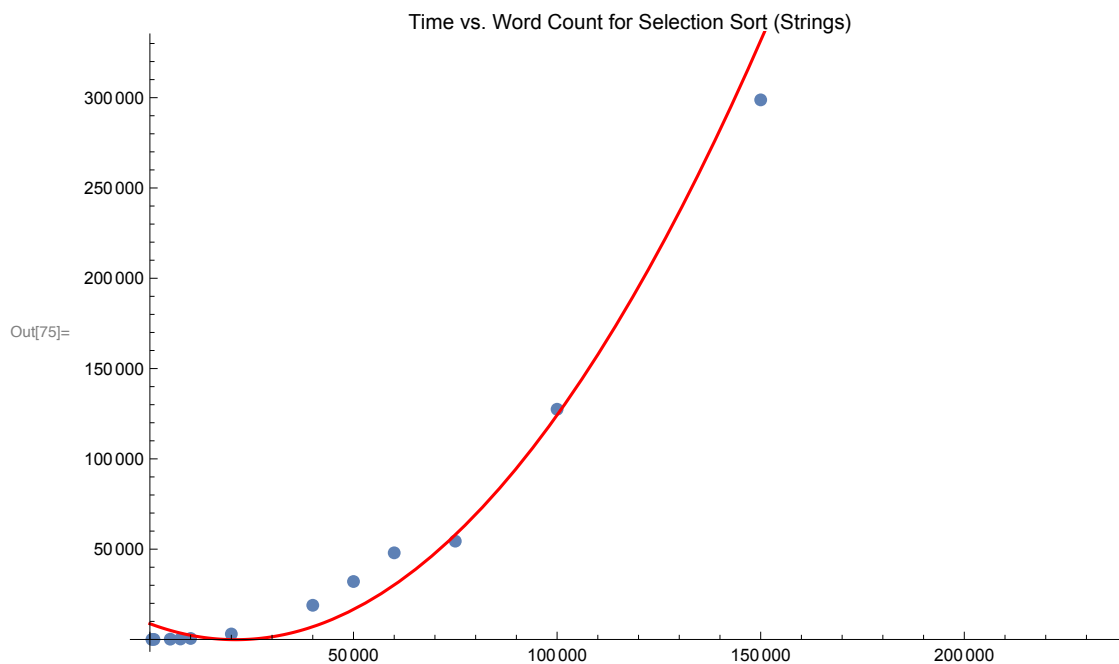
```

```

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

```

Out[74]=  $8728.08 - 0.840075 \text{ words} + 0.0000199497 \text{ words}^2$



Out[75]=

```

Set::write : Tag List in
{499500, 49995000, 704982704, 1634976888, 199990000, 2051180779, 799980000, 124750, 12497500, 1249975000,
1799970000, 28121250, 1482504796}[words_] is Protected. >>

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Out[76]=  $2.35215 \times 10^8 + 9215.97 \text{ words}$

