

```

In[91]:= (* processing selection sort times *)
data = Import["/Users/john/structures/assignment2/insertion.csv", "CSV"];
wordCounts = data[[All, 1]];
comparisons = data[[All, 2]];
swaps = data[[All, 3]];
times = data[[All, 4]];

```

In[96]:=

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

```

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

```

```

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

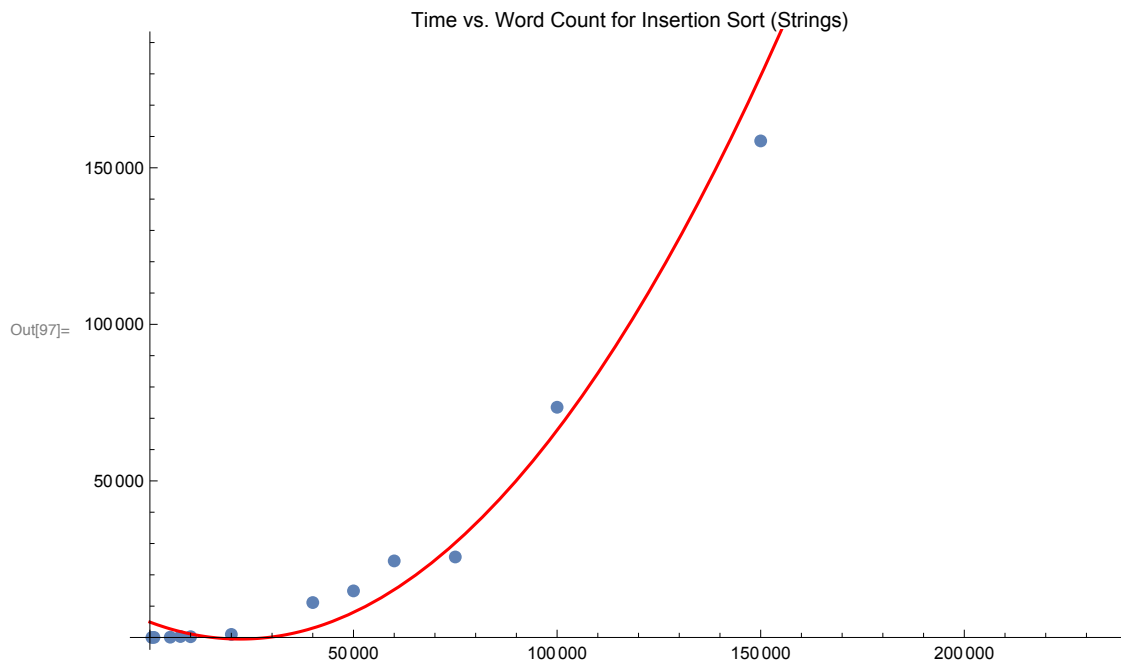
```

```

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

```

Out[96]= $4910.04 - 0.488735 \text{ words} + 0.0000110122 \text{ words}^2$



Out[97]=

Set::write : Tag List in
{248746, 25155950, 1796449531, 1332153645, 99935231, 1031956336, 398825791, 62650, 6244551, 623612400,
901267906, 14186214, 1406502306}[words_] is Protected. >>

Out[98]= $1.99876 \times 10^8 + 6674.14 \text{ words}$

