Graphical approach

A better way to find the relations between data is by plotting graphs/curves. So run the program for a variety of the size of input and store the time or comparison count C(n) in a file and then plot the two. For each function, take many different values of n, like n = 1000, 2000, 3000...,... ..100000,...1000000. Corresponding to each n plot there is a value C(n). Take enough number of points to give you a meaningful graph. On X-axis you will have the size of input, on Y-axis you will have the number of comparisons or time. I am attaching a gnuplot (find out what it is) script and a data file (which will be plotted by gnuplot) in a zip file *plot*. Understand this sample script, modify it if you need and plot your comparisons appropriately. You have to use the following command in terminal (plot.plg should be in the same directory else it will not be found) to run the script:

```
$ ./plot.plg
```

Alternatively you can use any other good plotting tool/utility that you find easy or comfortable to use.