

Structure of data.txt file:

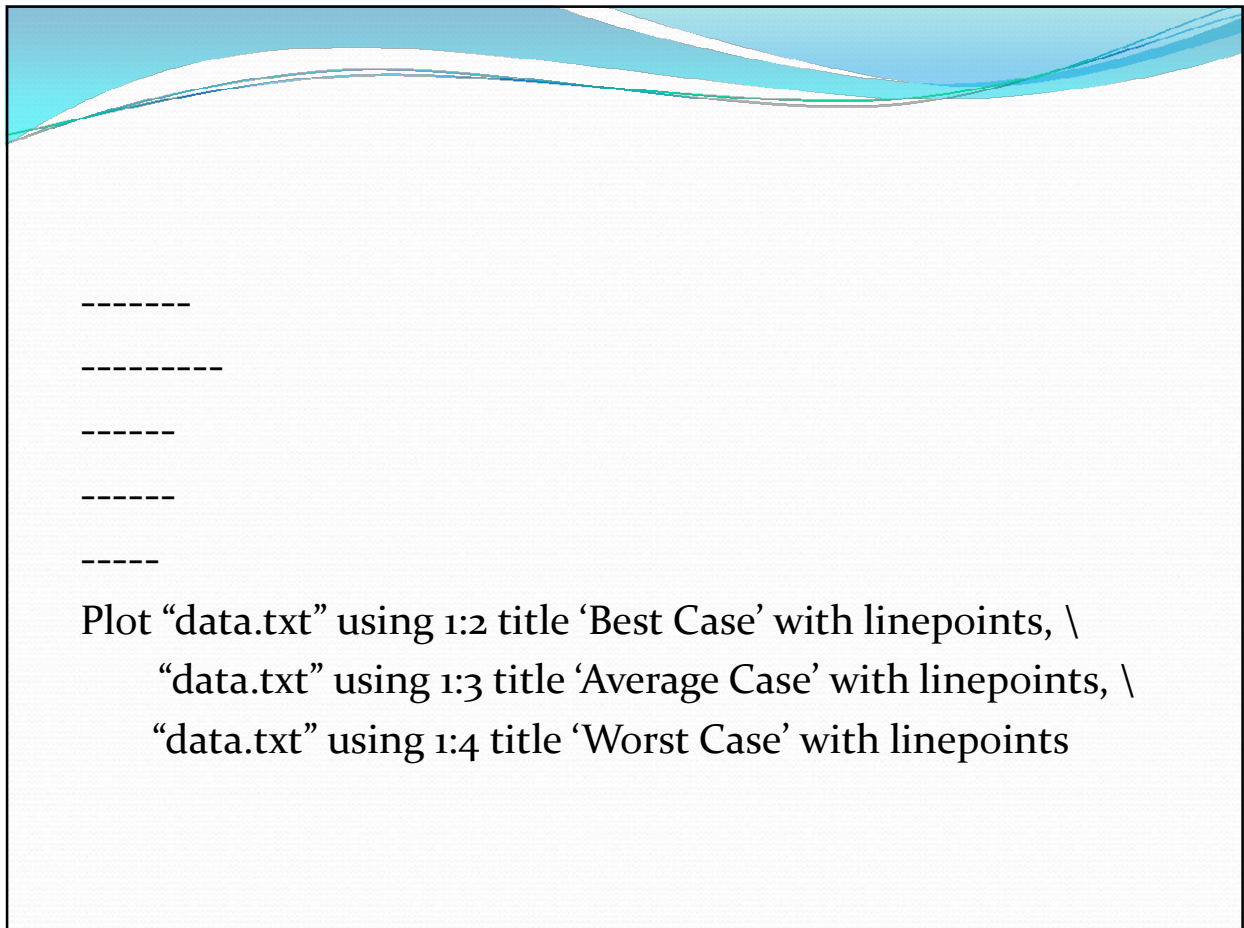
#TitleText: Accuracy Compararion

5 93.3 52.4 79.3

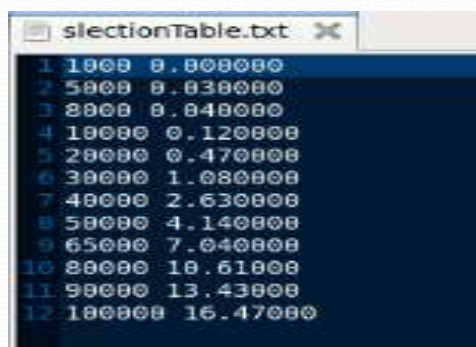
10 95.6 78.8 82.11

15 98.9 100 99.2720

20 91.5 95.5 92.36



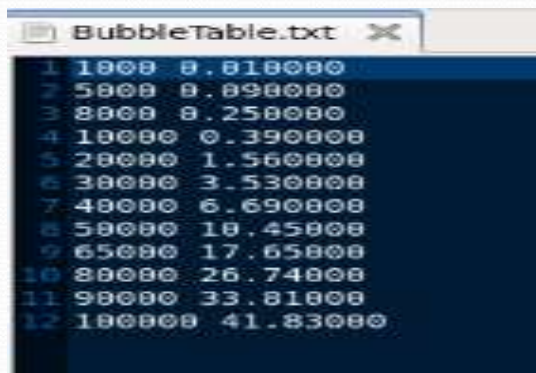
Structure of data.txt file:



```
slectionTable.txt X
1 1000 0.800000
2 5000 0.830000
3 8000 0.840000
4 10000 0.120000
5 20000 0.470000
6 30000 1.080000
7 40000 2.630000
8 50000 4.140000
9 65000 7.040000
10 80000 10.610000
11 90000 13.430000
12 100000 16.470000
```

| Index | Value | Percentage |
|-------|--------|------------|
| 1 | 1000 | 0.800000 |
| 2 | 5000 | 0.830000 |
| 3 | 8000 | 0.840000 |
| 4 | 10000 | 0.120000 |
| 5 | 20000 | 0.470000 |
| 6 | 30000 | 1.080000 |
| 7 | 40000 | 2.630000 |
| 8 | 50000 | 4.140000 |
| 9 | 65000 | 7.040000 |
| 10 | 80000 | 10.610000 |
| 11 | 90000 | 13.430000 |
| 12 | 100000 | 16.470000 |

Structure of data.txt file:



```
BubbleTable.txt X
1 1000 0.810000
2 5000 0.890000
3 8000 0.250000
4 10000 0.390000
5 20000 1.560000
6 30000 3.530000
7 40000 6.690000
8 50000 10.45000
9 65000 17.65000
10 80000 26.74000
11 90000 33.81000
12 100000 41.83000
```

| Index | Value | Time |
|-------|--------|----------|
| 1 | 1000 | 0.810000 |
| 2 | 5000 | 0.890000 |
| 3 | 8000 | 0.250000 |
| 4 | 10000 | 0.390000 |
| 5 | 20000 | 1.560000 |
| 6 | 30000 | 3.530000 |
| 7 | 40000 | 6.690000 |
| 8 | 50000 | 10.45000 |
| 9 | 65000 | 17.65000 |
| 10 | 80000 | 26.74000 |
| 11 | 90000 | 33.81000 |
| 12 | 100000 | 41.83000 |

Structure of dataplot.p file:

```
set autoscale          # scale axes automatically
unset log              # remove any log-scaling
unset label            # remove any previous labels
set xtic auto          # set xtics automatically
set ytic auto          # set ytics automatically
set tics font "Helvetica,10"
set title "Analysis of Complexity of Algorithms"
set xlabel "Input Size"
set ylabel "Time Taken"
#set key 0.01,100
#set label "Yield Point" at 0.003,260
#set arrow from 0.0028,250 to 0.003,280

#set xr [1000:200000]
#set yr [0.00000:50]
plot "selectionTable.txt" using 1:2 title 'Selection Sort' with linespoints, \
     "BubbleTable.txt" using 1:2 title 'Bubble Sort' with linespoints
```

Command for plotting the graph using gnuplot

```
[user@computing58 aryan_algo_2]$ gnuplot

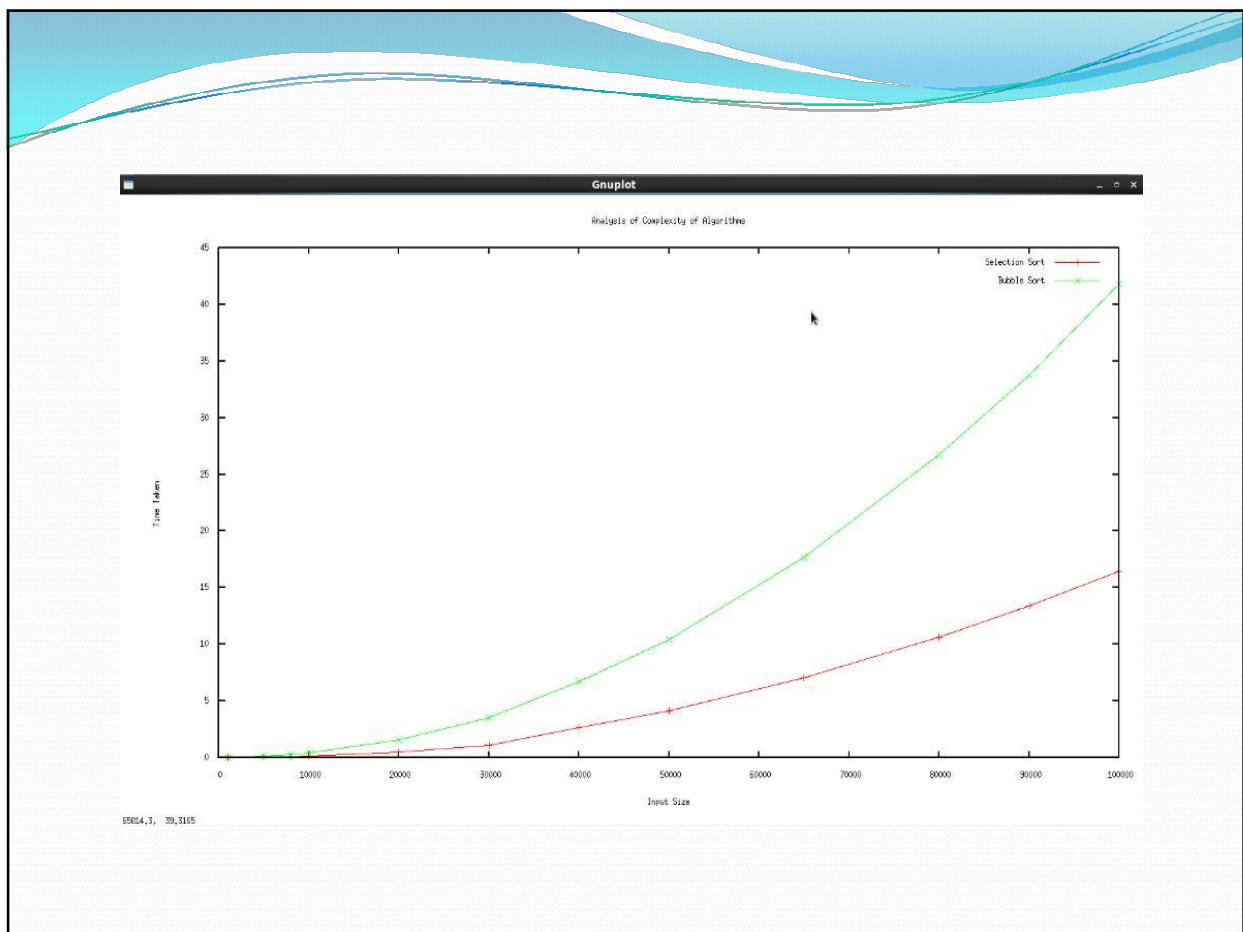
G N U P L O T
Version 4.2 patchlevel 6
last modified Sep 2009
System: Linux 2.6.32-504.12.2.el6.i686

Copyright (C) 1986 - 1993, 1998, 2004, 2007 - 2009
Thomas Williams, Colin Kelley and many others

Type 'help' to access the on-line reference manual.
The gnuplot FAQ is available from http://www.gnuplot.info/faq/

Send bug reports and suggestions to <http://sourceforge.net/projects/gnu
plot>

Terminal type set to 'x11'
gnuplot> load 'dataplot.p'
gnuplot> █
```

Structure of dataplot.p file:

```
set autoscale          # scale axes automatically
unset log              # remove any log-scaling
unset label            # remove any previous labels
set xtic auto          # set xtics automatically
set ytic auto          # set ytics automatically
set tics font "Helvetica,10"
set title "Analysis of Complexity of Algorithms"
set xlabel "Input Size"
set ylabel "Time Taken"
#set key 0.01,100
#set label "Yield Point" at 0.003,260
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#set xr [1000:200000]
#set yr [0.00000:50]
plot "selectionTable.txt" using 1:2 title 'Selection Sort' with linespoints, \
     "BubbleTable.txt" using 1:2 title 'Bubble Sort' with linespoints
```