

Plotting with GNUPLOT

```
# To plot  
plot "data.dat"
```

```
# To remove default key  
unset key
```

```
# To re-plot with the changes made:  
gnuplot> replot
```

```
# To give a title(t) to plot, you use the option "title"  
# Ensure that you have the "key" set so that title can show  
gnuplot> plot "potential.dat" title "Potential energy vrs time"
```

```
# Changing the line types  
# 'linetype(lt)' changes type of line  
# 'linecolor(lc)' changes color of line  
gnuplot> plot "potential.dat" title "Potential energy vrs time" linetype 7 linecolor 0
```

```
# 'test' gives
```

```
# Connect the datapoints with lines or linespoints  
plot "potential.dat" title "Potential energy vrs time" linetype 7 linecolor 0 with linespoints
```

```
# You can use shorter version of plot-related keywords  
# 'linetype = lt ' changes type of line  
# 'linecolor = lc' changes color of line  
# 'linespoints = lp' connects datapoints with line  
gnuplot> plot "potential.dat" title "Potential energy vrs time" lt 7 lc 0 w lp
```

```
# You can also connect datapoints with just lines  
gnuplot> plot "potential.dat" title "Potential energy vrs time" lt 7 lc 0 w lines
```

```
#You can plot multiple curves on the same plot.  
#You simply choose a new data file and add other properties or parameters to it.  
gnuplot> plot "potential.dat" title "Berendsen vrs time" lt 7 lc 0 w lp, "potential_noose.dat" title  
"Noose-H Pot" lt 8 lc 12 w lines
```

```
# Specifying columns to plot:  
gnuplot> plot "potential.dat" using 1:2 title "Potential energy vrs time" lt 7 lc 0 w lines
```

```
# Specifying columns to plot for multiple plots:  
gnuplot> plot "potential_berend_noose.dat" using 1:2 title "Berendsen vrs time" lt 7 lc 0 w  
lines, " using 1:3 title "Noose" lt 8 lc 12 w lp
```

#You can also plot functions

You can set the range of the X-axis

```
gnuplot> set xrange [lowerbound:upperbound]
```

```
gnuplot> set xrange [0:75]
```

Axes Labelling

```
gnuplot> set xlabel "Time(ps)"
```

```
gnuplot> set ylabel "Pot Energy(kJ/mol)"
```

Saving chart

Set output file type

```
gnuplot> set terminal png size 800,600
```

Name file output

```
gnuplot> set output "outputFileName.png"
```