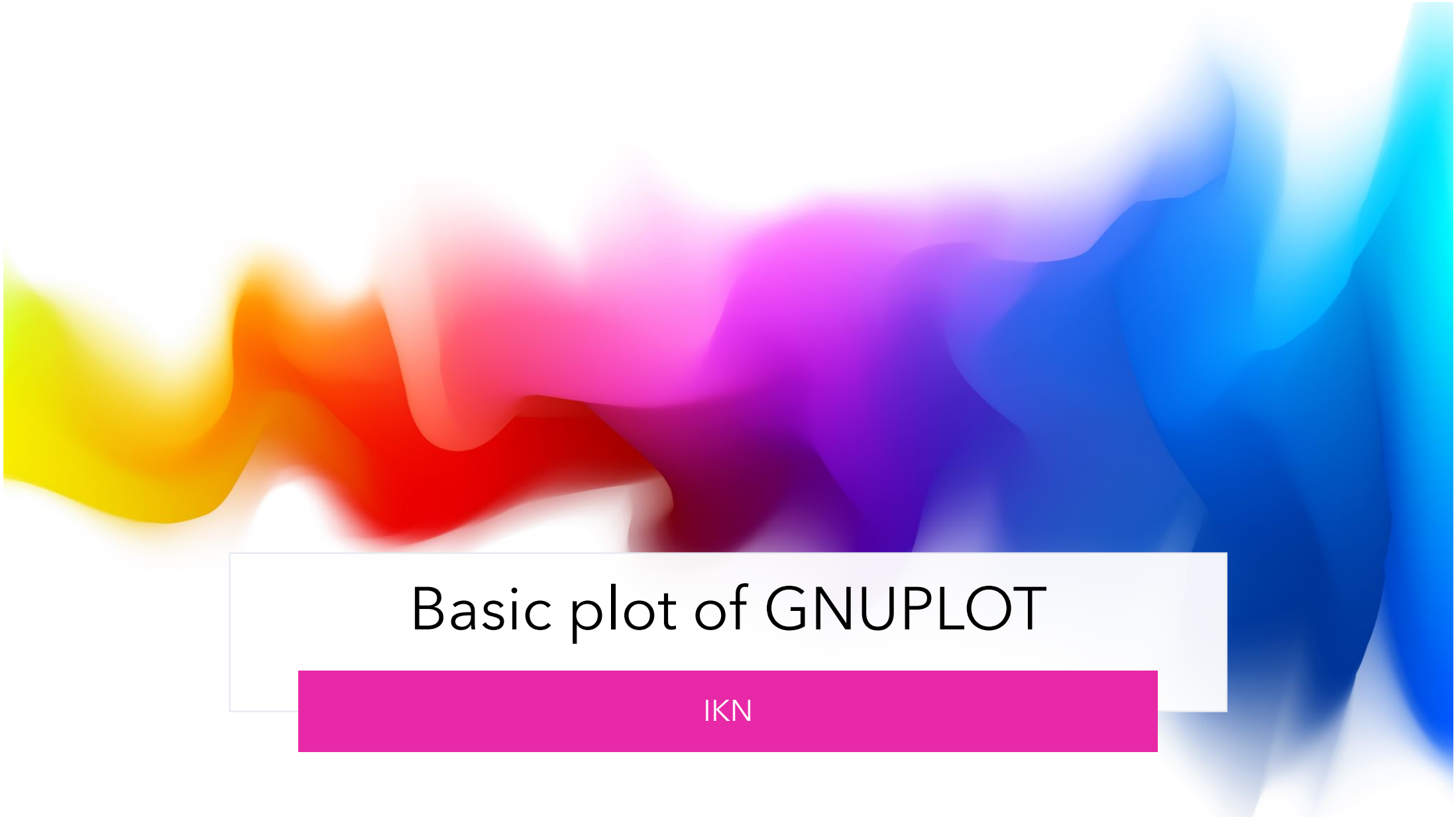
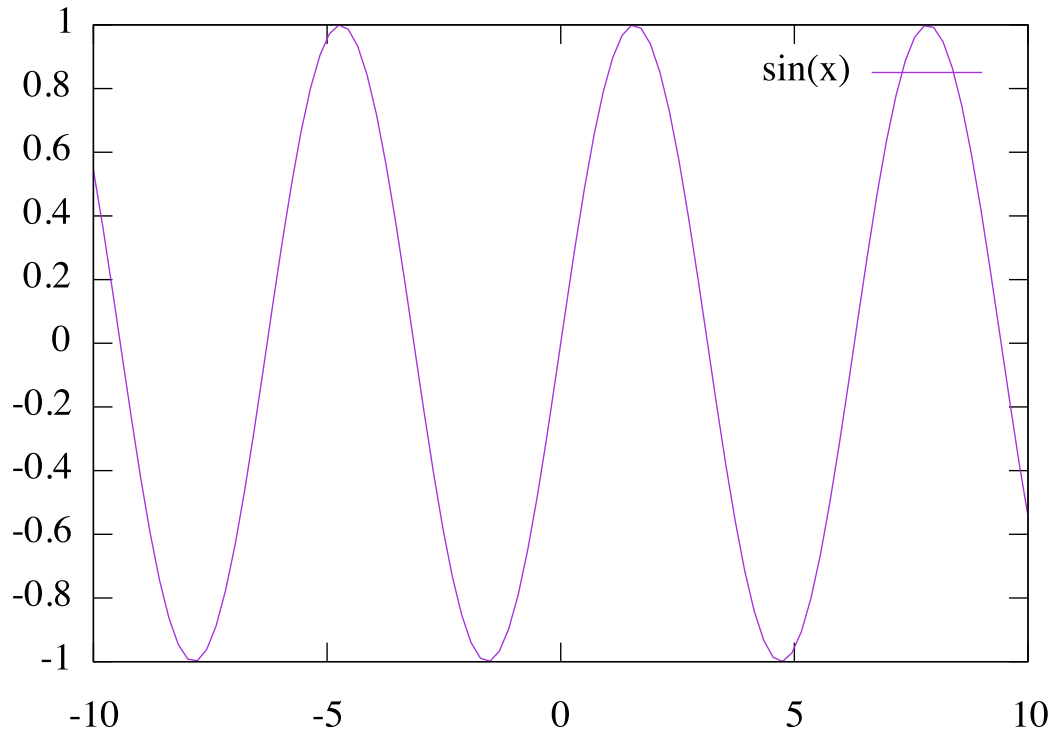


Basic plot of GNUPLOT

IKN

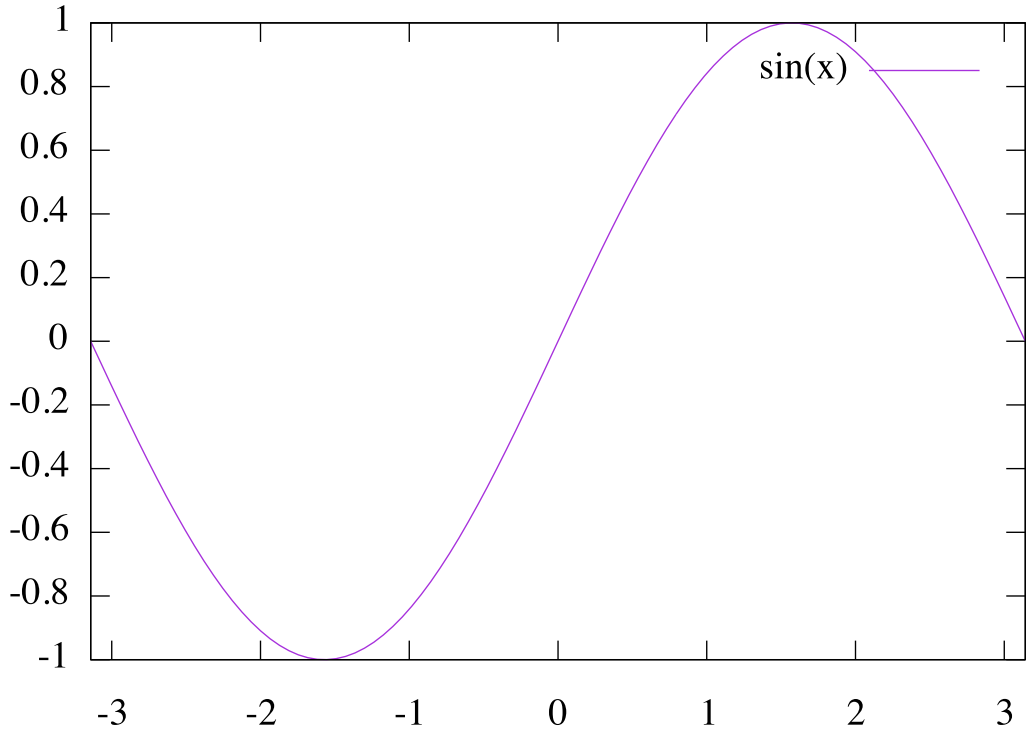
How to plot a function?

- `gnuplot> plot sin(x)`



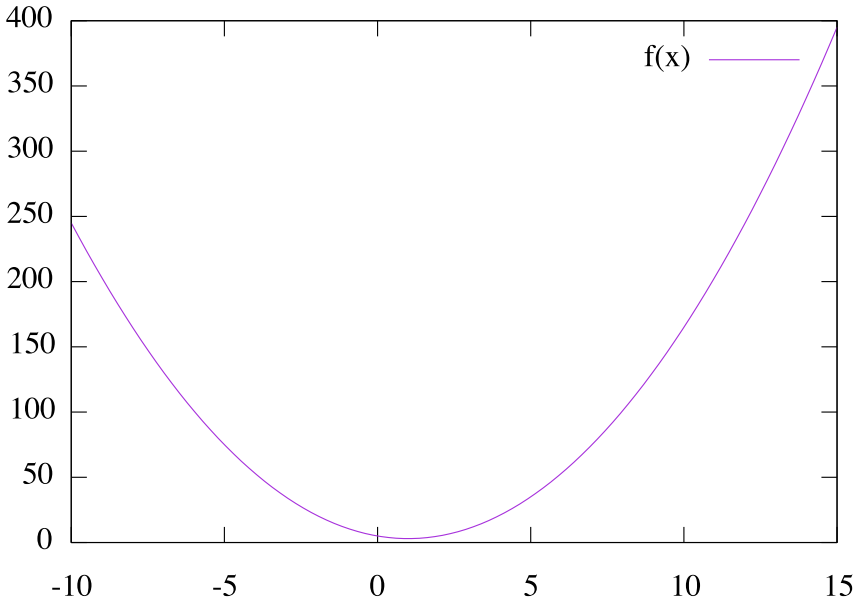
How to define the limit of a function?

- `plot [-pi:pi] sin(x)`



How to plot a function?

- `gnuplot> f(x) = 2*x**2 - 4*x + 5`
- `gnuplot> plot [x=-10:15] f(x)`



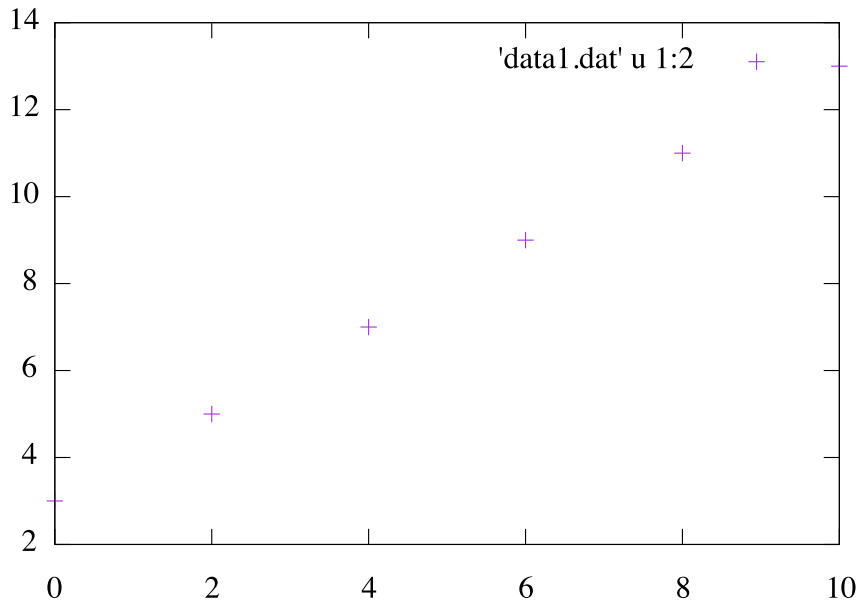
How to plot from a file?

data1.dat

```
# month gracilaria eucheuma gelidium sargassum
1 3 2 2 2
2 5 3 4 4
3 7 6 7 7
4 9 8 9 9
5 11 12 10 10
6 13 14 13 14
```

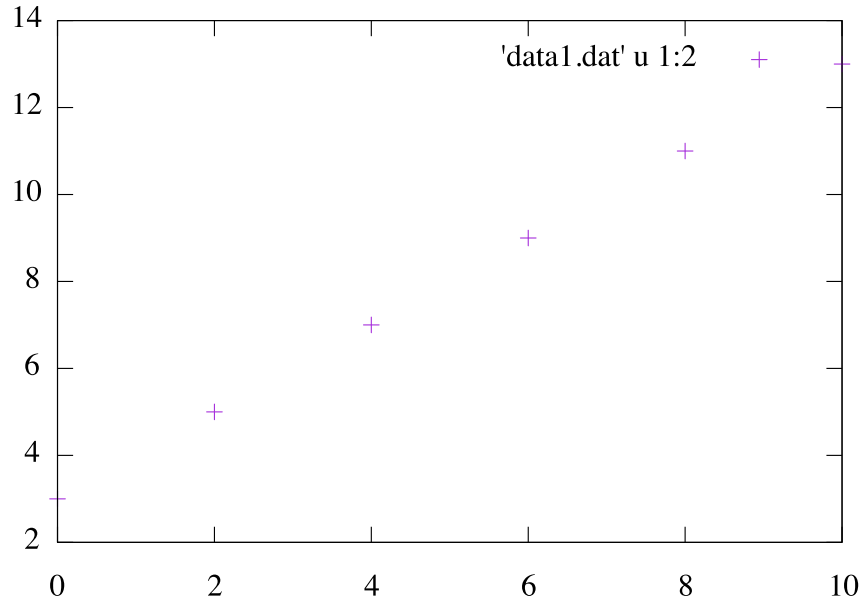
How to plot from a file?

- `gnuplot> plot “data1.dat” using 1:2`



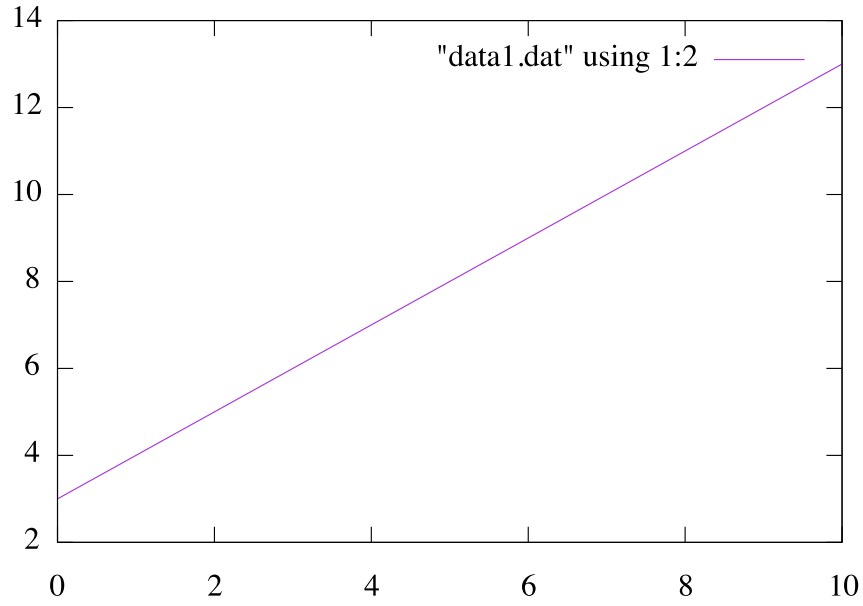
Plotting styles

- `gnuplot> plot "data1.dat" using 1:2 with points`



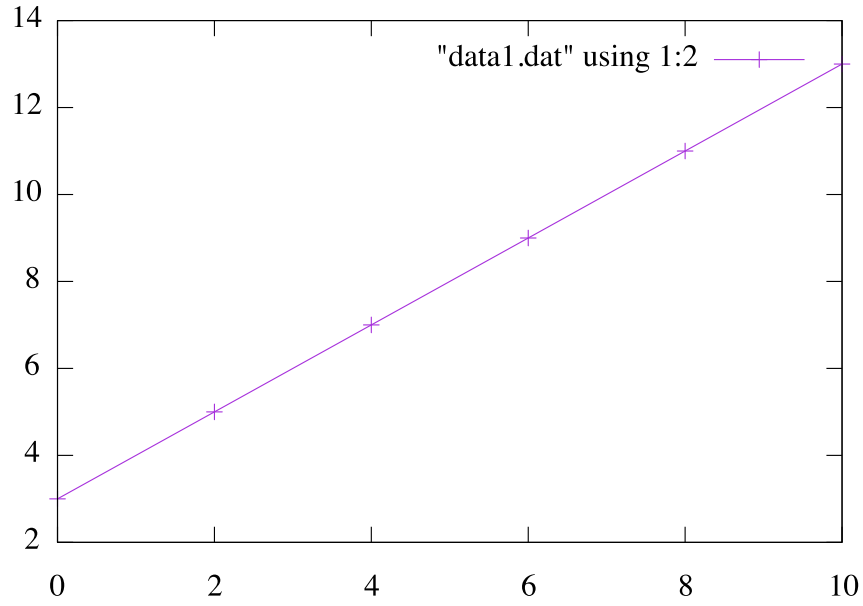
Plotting styles

- `gnuplot> plot "data1.dat" using 1:2 with lines`



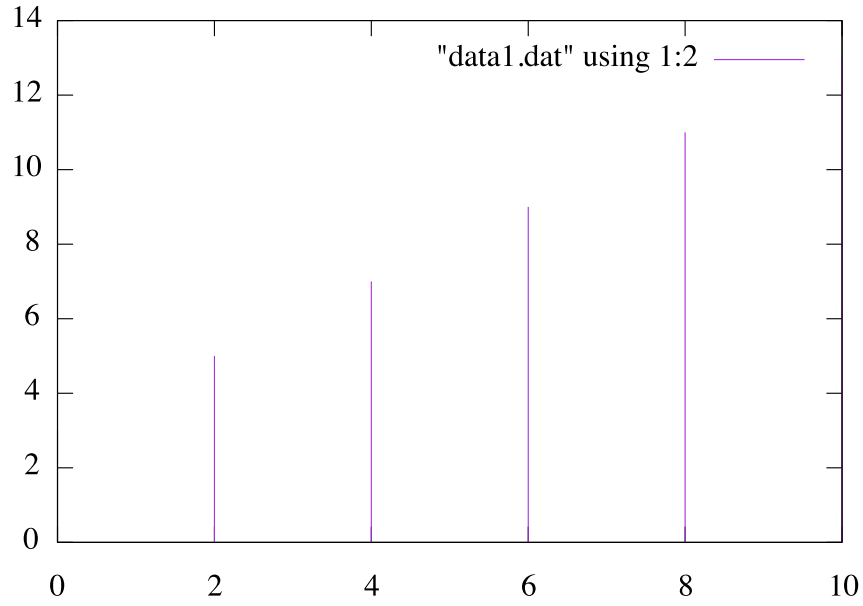
Plotting styles

- `gnuplot> plot "data1.dat" using 1:2 with linespoints`



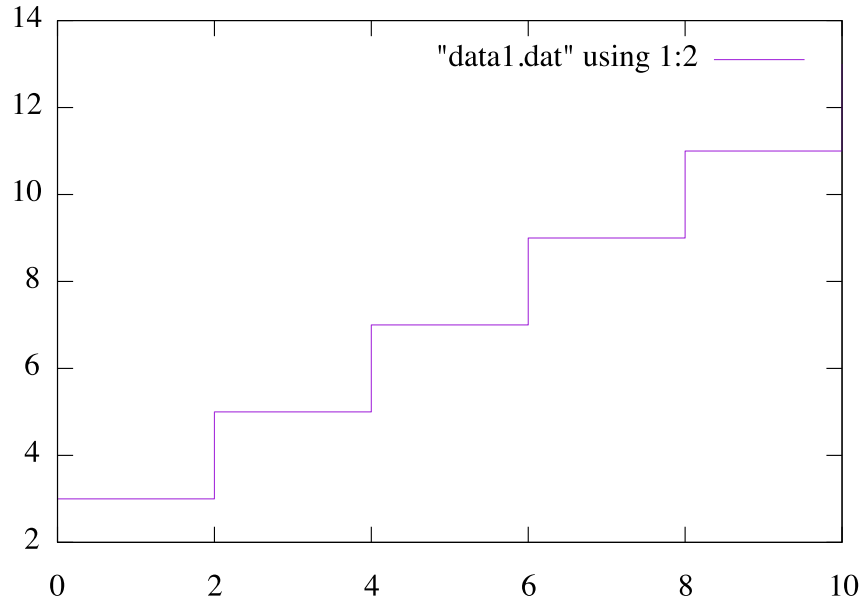
Plotting styles

- `gnuplot> plot "data1.dat" using 1:2 with impulses`



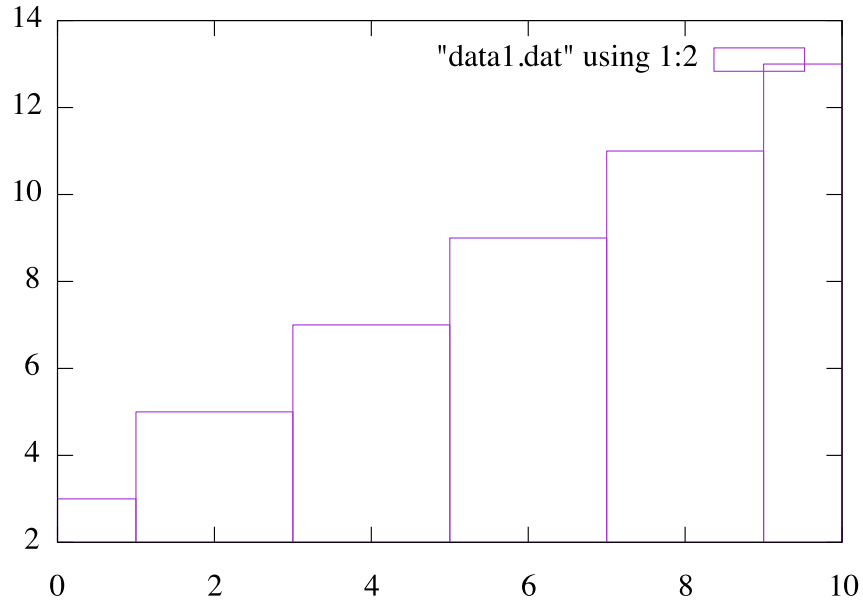
Plotting styles

- `gnuplot> plot "data1.dat" using 1:2 with steps`



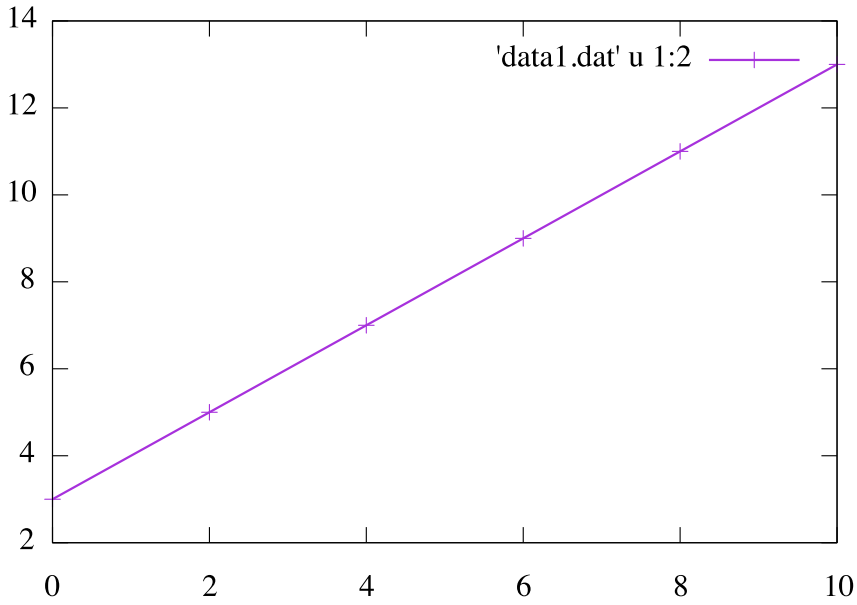
Plotting styles

- `gnuplot> plot "data1.dat" using 1:2 with boxes`



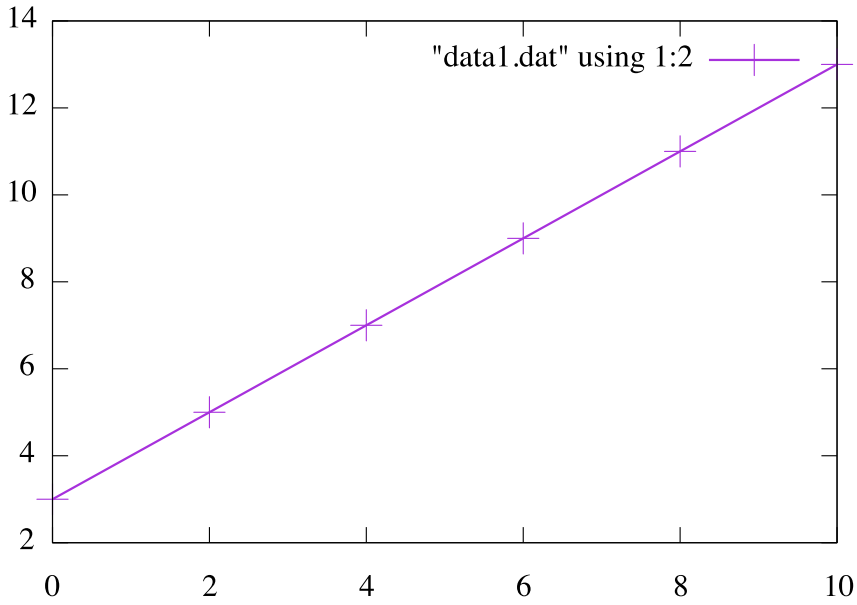
How to change the width of lines?

- `gnuplot> plot “data1.dat” using 1:2 with linespoints linewidth 2`



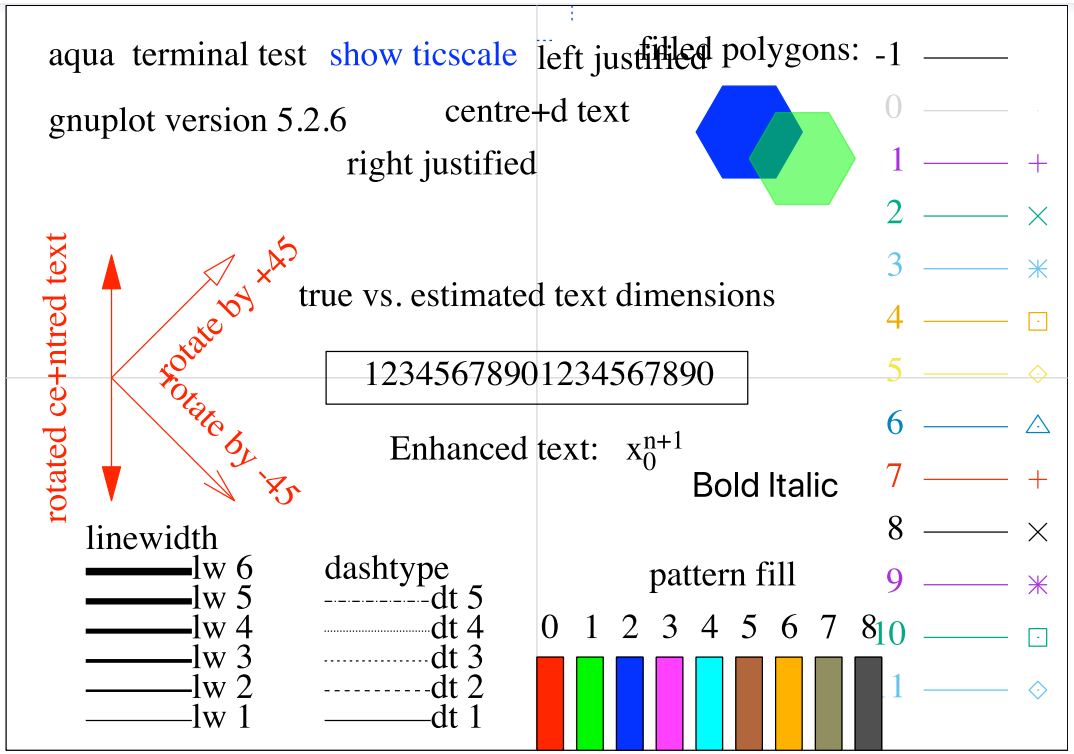
How to change the size of points?

- `gnuplot> plot “data1.dat” using 1:2 with linespoints linewidth 2 pointsize 2`



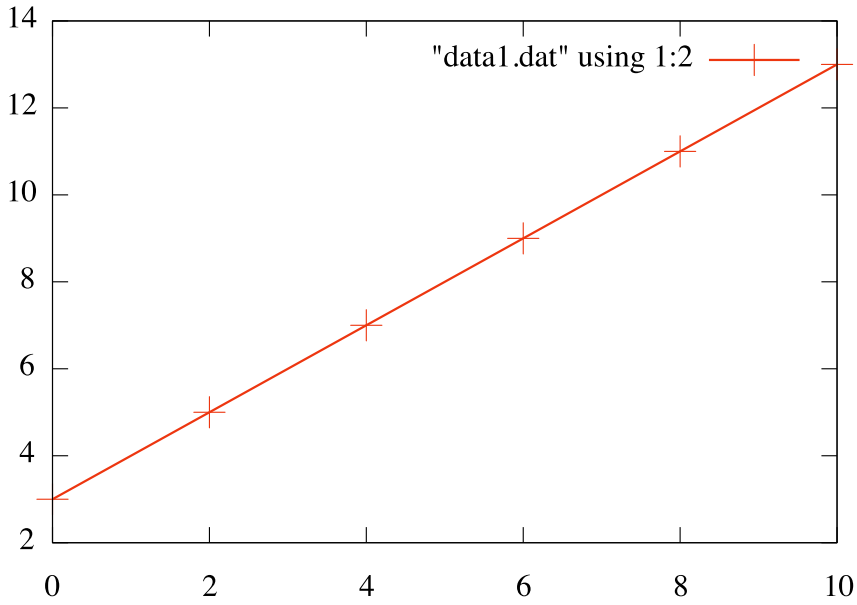
Style reference

- `gnuplot> test`



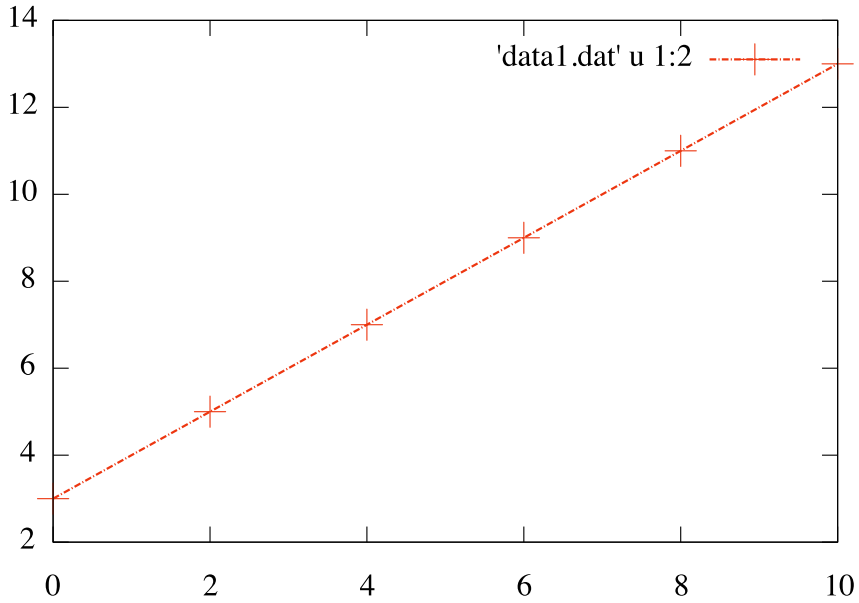
How to change the color of lines?

- `gnuplot> plot “data1.dat” using 1:2 with linespoints linecolor 7 linewidth 2 pointsize 2`



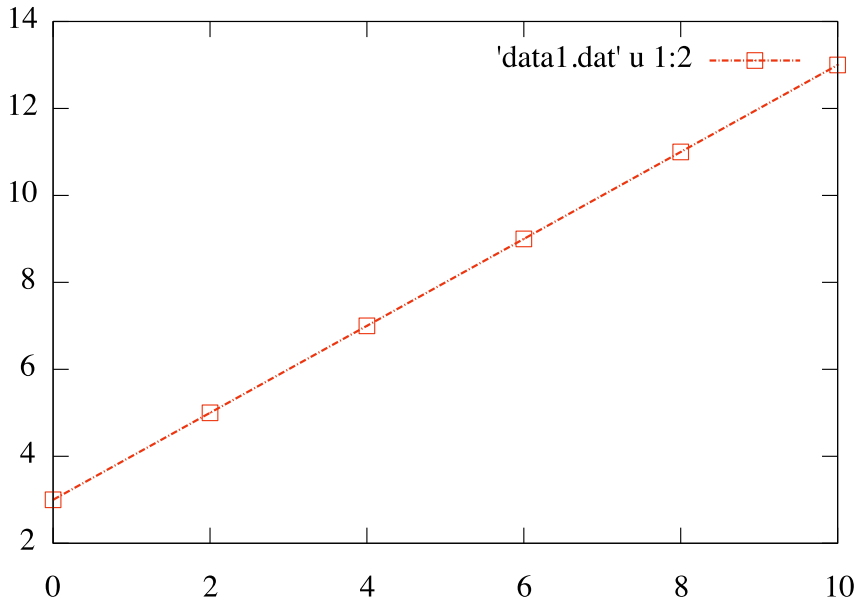
How to change the dashtype?

- `gnuplot> plot “data1.dat” using 1:2 with linespoints linecolor 7 dashtype 5 linewidth 2 pointsize 2`



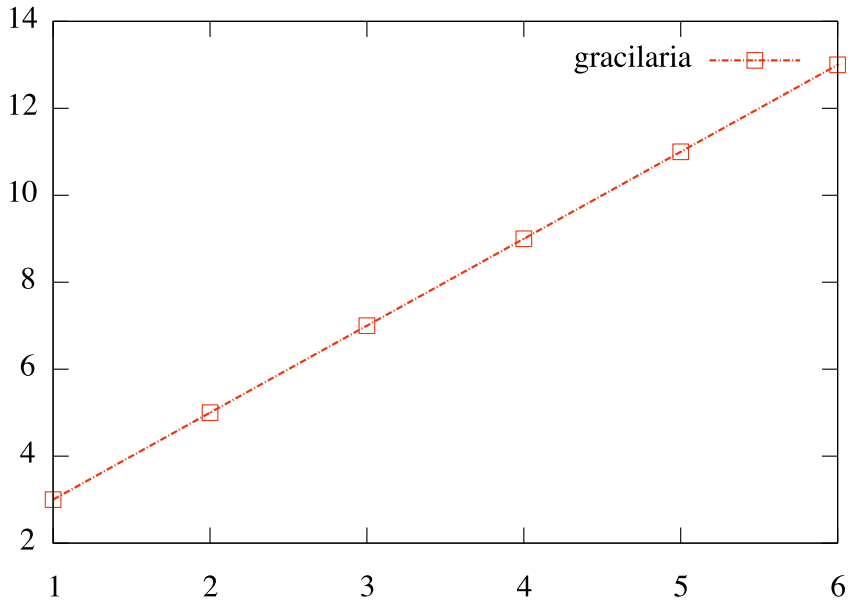
How to change the point type?

- gnuplot> plot “data1.dat” using 1:2 with linespoints linecolor 7 dashtype 5 linewidth 2 pointsize 1 pointtype 4



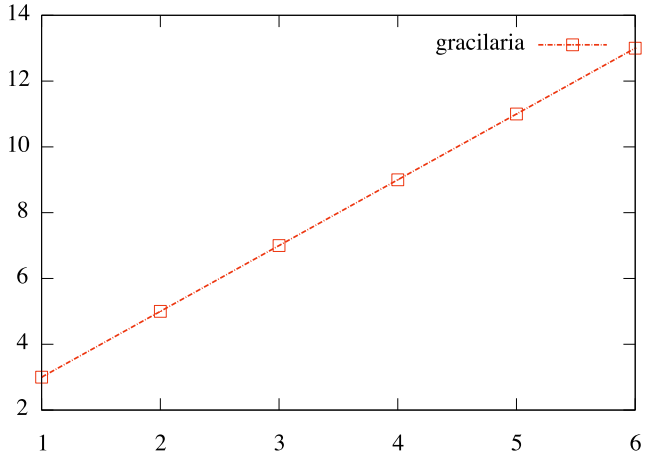
How to change the legend name?

- `gnuplot> plot “data1.dat” using 1:2 with linespoints linecolor 7 dashtype 5 linewidth 2 pointsize 1 pointtype 4 title “gracilaria”`



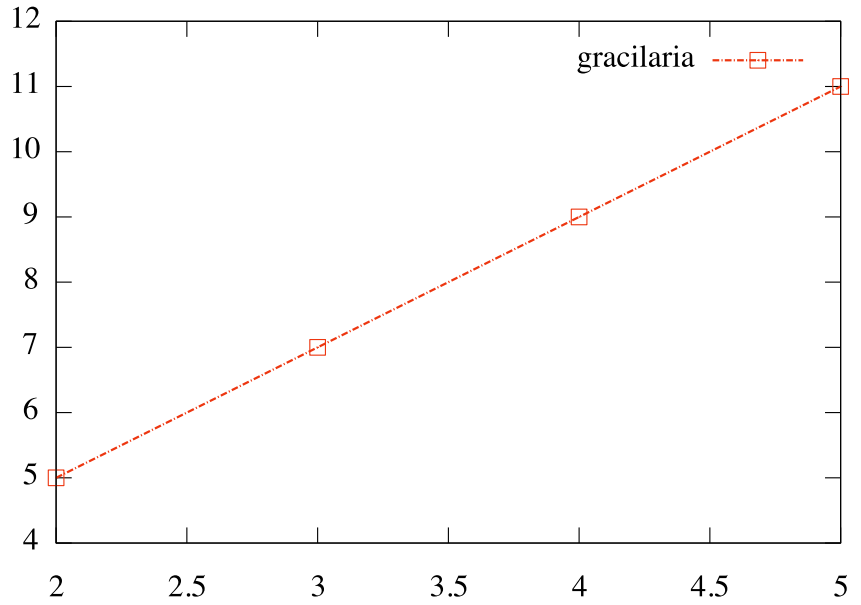
Write in compact style

- gnuplot> plot “data1.dat” using 1:2 with linespoints linecolor 7 dashtype 5 linewidth 2 pointsize 1 pointtype 4 title “gracilaria”
- gnuplot> p [2:8] [4:12] “data1.dat” u 1:2 w lp lc 7 dt 5 lw 2 ps 1 pt 4 t" gracilaria”



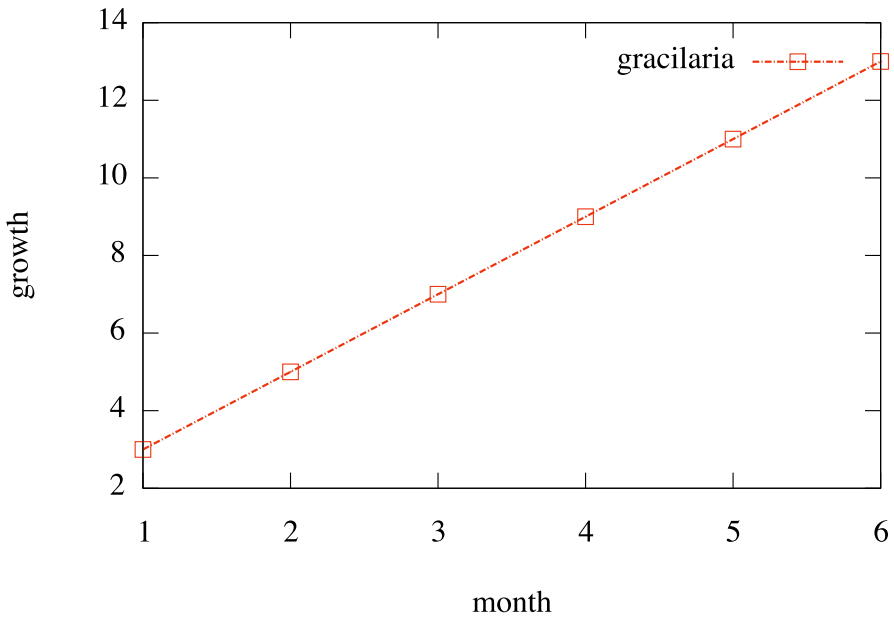
How to change the limit of axis?

- `gnuplot> set xrange [2:5]`
- `gnuplot> set yrange [4:12]`
- `gnuplot> replot`



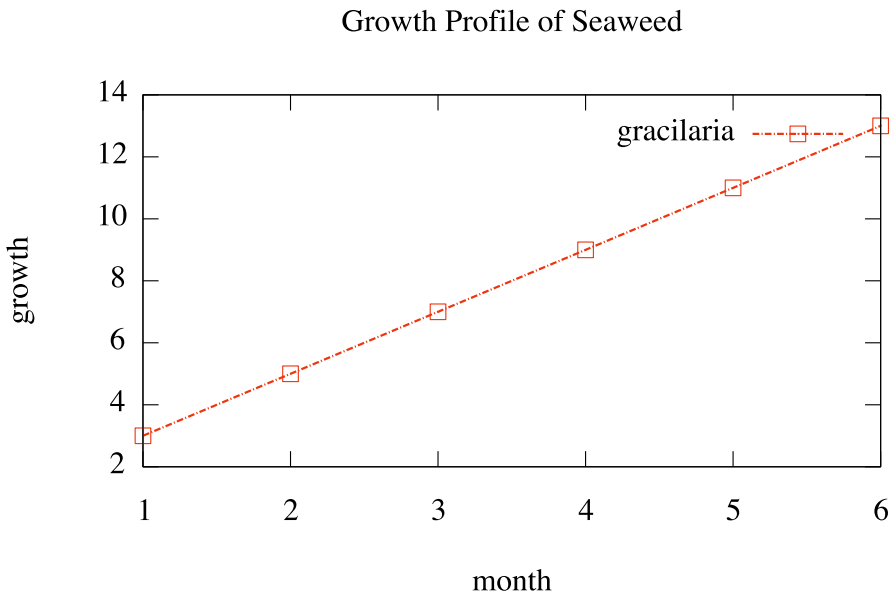
How to give the axis label?

- `gnuplot> set xlabel "month"`
- `gnuplot> set ylabel "growth"`
- `gnuplot> replot`



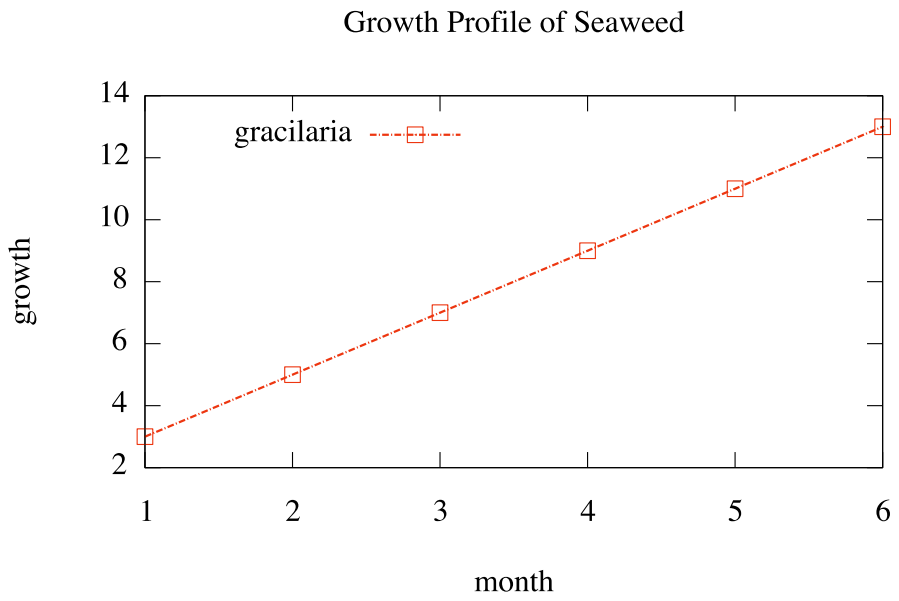
How to give a title?

- `gnuplot> set title "Growth Profile of Seaweed"`
- `gnuplot> replot`



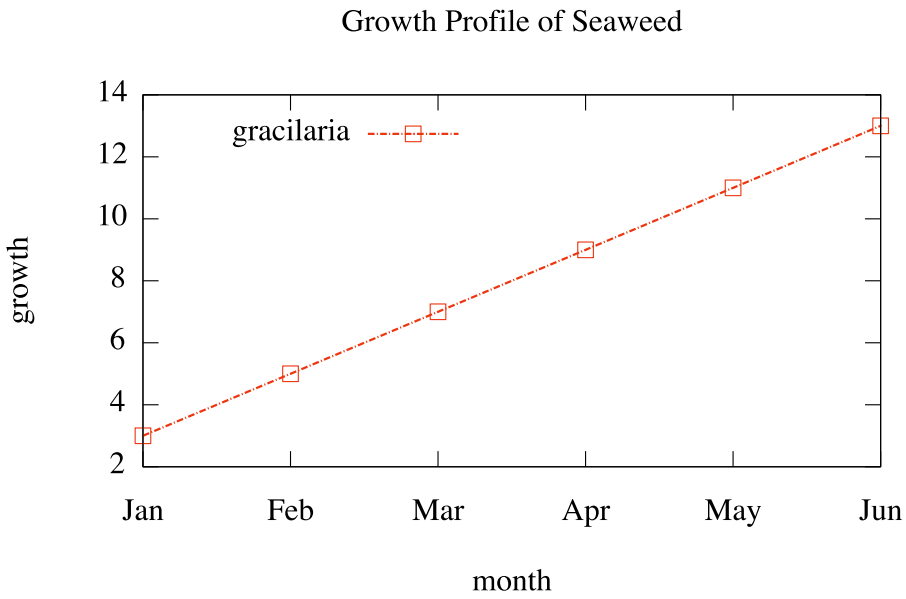
How to change the legend position?

- `gnuplot> set key left top`
- `gnuplot> replot`



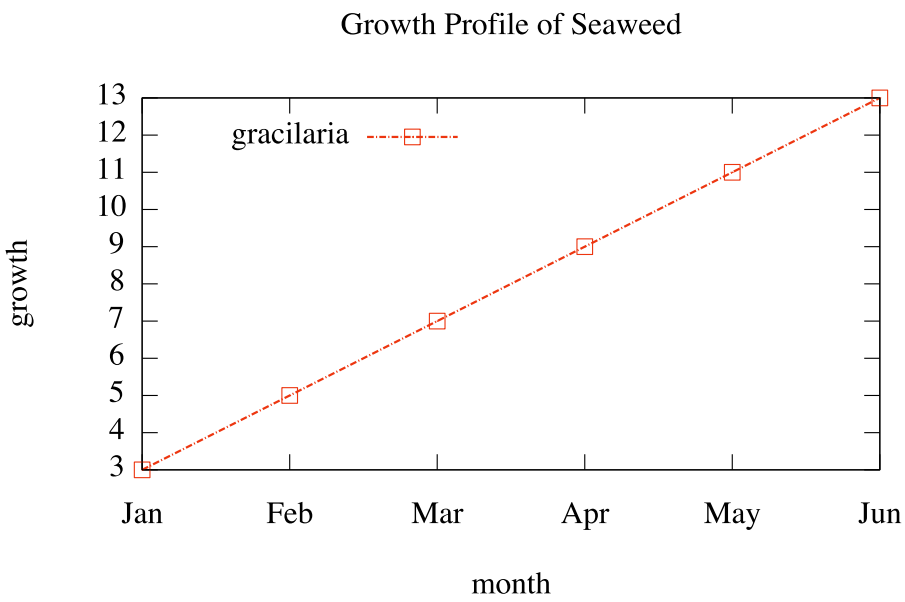
How to change the tics label?

- `gnuplot> set xtics ("Jan" 1, "Feb" 2, "Mar" 3, "Apr" 4, "May" 5, "Jun" 6)`
- `gnuplot> replot`



How to change the tics interval?

- `gnuplot> set ytics 3,1,13`
- `gnuplot> replot`



How to plot by using script?

plot.plt

```
plot "data1.dat" using 1:2 with linespoints linecolor 7
dashtype 5 linewidth 2 pointsize 1 pointtype 4 title
"gracilaria"


set xlabel "month"

set ylabel "growth"

set title "Growth Profile of Seaweed"

set key left top

set xtics ("Jan" 1, "Feb" 2, "Mar" 3, "Apr" 4, "May" 5, "Jun"
6)

set ytics 3,1,13

replot
```

$ gnuplot plot.plt