

How to rotate x-axis labels on Gnuplot

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Question: I want to rotate the x-axis (xtics) labels in a Gnuplot figure. What is the Gnuplot command to rotate x-axis labels?

When you plot many bars along with their labels across x-axis, rotating labels on x-axis helps save space.

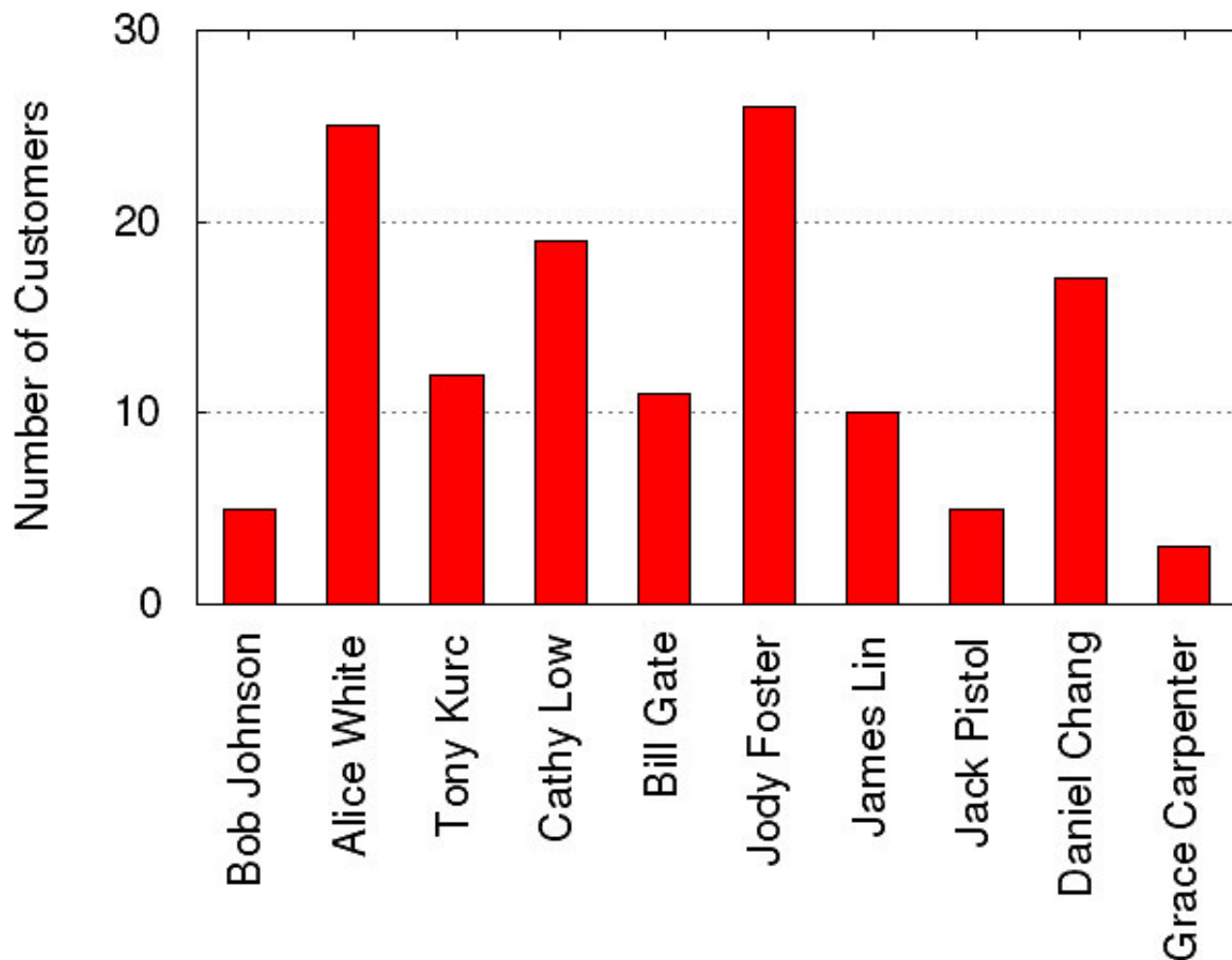
To rotate x-axis labels on [Gnuplot](#), you can use the following command.

```
set xtics rotate {by } {offset }
```

It will rotate x-axis labels by degrees counter-clockwise. Optionally, you can also specify the offset of the labels to adjust their positions. Without any angle parameter, it will by default rotate the labels by 90 degrees.

For example, the following Gnuplot script will produce a bar graph with x-axis labels rotated by 90 degrees.

```
set terminal png font "Helvetica" 16 set output 'plot.png' set key left set  
t grid y set boxwidth 0.5 set style fill solid 1.0 border -1 set ytics 10 no  
mirror set yrange [:] set ylabel "Number of Customers" set xtics rotate set  
bmargin 8 plot 'plot1.dat' using 1:3:xtic(2) notitle with boxes
```



The next Gnuplot script will create a bar graph with x-axis labels rotated by 45 degrees, and their positions adjusted.

```
set terminal png font "Helvetica" 16 set output 'plot.png' set key left set  
t grid y set boxwidth 0.5 set style fill solid 1.0 border -1 set ytics 10 no  
mirror set yrange [:] set ylabel "Number of Customers" set xtics rotate by 4  
5 offset -0.8,-1.8 set bmargin 3 plot 'plot2.dat' using 1:3:xtic(2) notitle w  
ith boxes
```

