NAME

graph − draw a graph

SYNOPSIS

graph [option] ... | plotter

DESCRIPTION

Graph with no options takes pairs of numbers from the standard input as abscissas and ordinates of a graph. The graph is written on the standard output to be piped to the *plotter* program for a particular device; see *plot*(I).

If the coordinates of a point are followed by a nonnumeric string, that string is printed as a label beginning at the point. Labels may be surrounded with quotes "...", in which case they may contain blanks or begin with numeric characters; labels never contain newlines.

The following options are recognized, each as a separate argument.

−a Supply abscissas automatically (they are missing from the input); spacing is given by the next argument, or is assumed to be 1 if next argument is not a number. A second optional argument is the starting point for the automatic abscissa.

−c Character string given by next argument is default label for each point.

−d Omit connections between points. (Disconnect.)

−g*n* Grid style:
n=0, no grid
n=1, axes only
n=2, complete grid (default).

−l Next argument is label for graph.

−s Save screen, don't erase before plotting.

−x Next 1 (or 2) arguments are lower (and upper) *x* (abcissa) limits. Third argument, if present, is grid spacing on *x* axis. Normally these quantities are determined automatically.

−y Similarly for *y* (ordinate) axis.

−h Next argument is fraction of space for height.

−w Similarly for width.

−r Next argument is fraction of space to move right before plotting.

−u Similarly to move up before plotting.

−t Transpose horizontal and vertical axes.

Points are connected by straight line segments in the order they appear in input. If a specified lower limit exceeds the upper limit, or if the automatic increment is negative, the graph is plotted upside down. Automatic abscissas begin with the lower *x* limit, or with 0 if no limit is specified. Labels are placed so that the center of an initial letter such as + will fall approximately on the plotting point.

SEE ALSO

plot(I), spline(I)

BUGS

Graph stores all points internally even when limits are explicit, so utterly enormous graphs can fail unnecessarily.