R - Line Graphs

A line chart is a graph that connects a series of points by drawing line segments between them. These points are ordered in one of their coordinate (usually the x-coordinate) value. Line charts are usually used in identifying the trends in data.

The **plot()** function in R is used to create the line graph.

Syntax

The basic syntax to create a line chart in R is −

plot(v,type,col,xlab,ylab)

Following is the description of the parameters used −

* **v** is a vector containing the numeric values.
* **type** takes the value "p" to draw only the points, "l" to draw only the lines and "o" to draw both points and lines.
* **xlab** is the label for x axis.
* **ylab** is the label for y axis.
* **main** is the Title of the chart.
* **col** is used to give colors to both the points and lines.

# Create the data for the chart.

v <- c(7,12,28,3,41)

# Plot the bar chart.

plot(v,type = "o")

## Line Chart Title, Color and Labels

The features of the line chart can be expanded by using additional parameters. We add color to the points and lines, give a title to the chart and add labels to the axes.

### Example

# Create the data for the chart.

v <- c(7,12,28,3,41)

# Plot the bar chart.

plot(v,type = "o", col = "red", xlab = "Month", ylab = "Rain fall",

main = "Rain fall chart")

## Multiple Lines in a Line Chart

More than one line can be drawn on the same chart by using the **lines()**function.

After the first line is plotted, the lines() function can use an additional vector as input to draw the second line in the chart,

# Create the data for the chart.

v <- c(7,12,28,3,41)

t <- c(14,7,6,19,3)

# Plot the bar chart.

plot(v,type = "o",col = "red", xlab = "Month", ylab = "Rain fall",

main = "Rain fall chart")

lines(t, type = "o", col = "blue")