



SNS COLLEGE OF TECHNOLOGY



Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC –
UGC with 'A+' Grade Approved by AICTE, New Delhi &
Affiliated to Anna University, Chennai

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

19AMB302-FULL STACK AI

M.POORNIMA DEVI,AP/AIML

PLOTTING OF DATA USING GENERIC PLOTS IN R PROGRAMMING – PLOT() FUNCTION

In this article, we will discuss how we plot data using Generic plots in R Programming Language using plot() Function.

plot function

plot() function in [R Programming Language](#) is defined as a generic function for plotting. It can be used to create basic graphs of a different type.

Syntax: plot(x, y, type)

Parameters

x and y: coordinates of points to plot

type: the type of graph to create

Returns: different type of plots

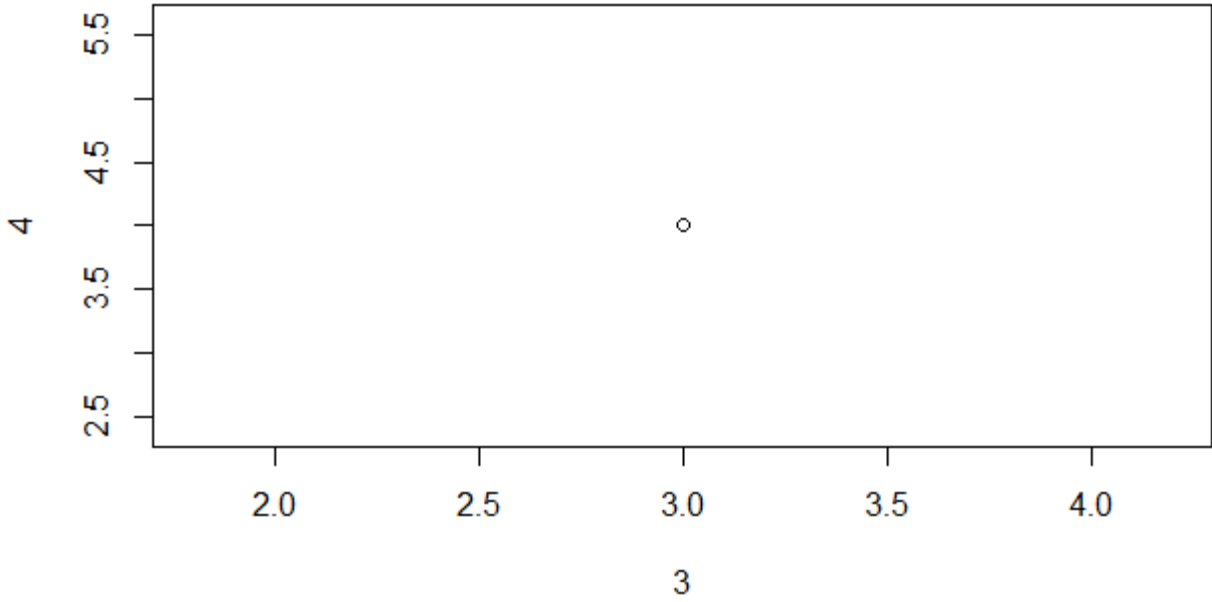
Draw Points using plot() Function in R

plot(3, 4)





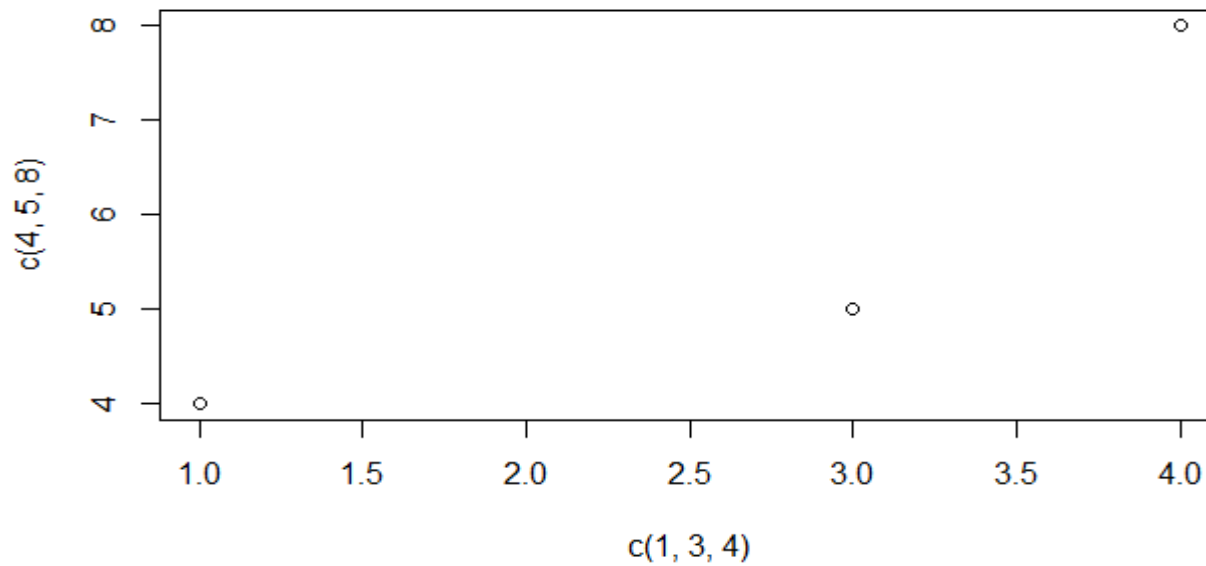
OUTPUT



Draw Multiple Points

```
plot(c(1, 3, 4), c(4, 5, 8))
```

OUTPUT





R program to plot data

Values for x and y axis

x <- 1:5

y <- x * x

Using plot() function with additional settings

**plot(x, y, type = "l", col = "blue", lwd = 2, xlab = "X-axis",
ylab = "Y-axis", main = "Quadratic Function")**

Add grid lines

grid()

Add points to highlight data

points(x, y, col = "red", pch = 16)

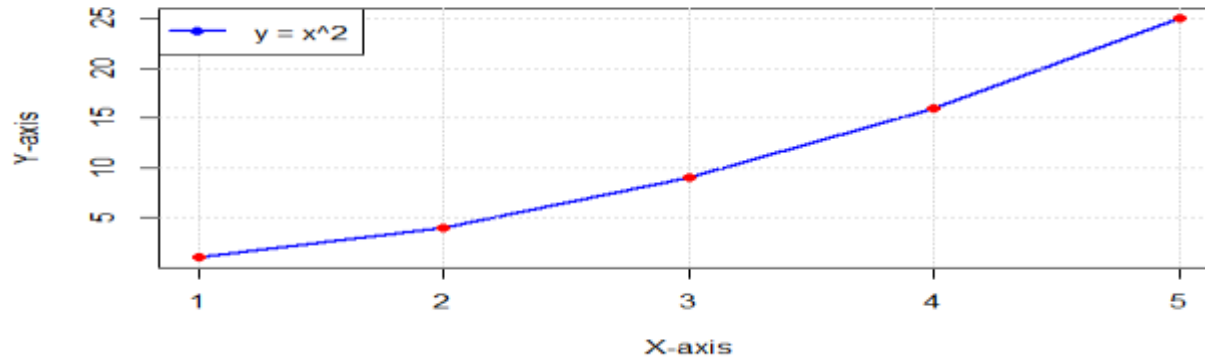
Add a legend

**legend("topleft", legend = "y = x^2", col = "blue", lty = 1,
lwd = 2, pch = 16)**



OUTPUT

Quadratic Function



In this code we create a line plot with labeled axes, a title, grid lines, and additional points.

`col`: Specifies the color of the line, `lwd`: Sets the line width, `xlab` and `ylab`: Label the x-axis and y-axis, respectively.

`main`: Adds a title to the plot, `grid()`: Adds grid lines to the plot, `points()`: Adds points to the plot to highlight the data.

`legend()`: Adds a legend to the plot.



THANKYOU