

Matplotlib

- Matplotlib is a low-level graph plotting library in python that serves as a visualization utility.
- Matplotlib was created by John D. Hunter.
- Matplotlib is open source and we can use it freely.
- Matplotlib is mostly written in python, a few segments are written in C.

Marker

The markers are a way of representing the graph through different symbols.

By default, it is either a simple line or points used to plot the graph.

But the matplotlib allows many more marker types that we can use. Some include pixel circle, tr_up, line, tickdown, mathtext, etc.

Marker	Description
'o'	Circle
'*'	Star
'.'	Point
','	Pixel
'x'	X
'X'	X (filled)
'+'	Plus
'p'	Plus (filled)
's'	Square
'D'	Diamond
'd'	Diamond (thin)
'p'	Pentagon
'H'	Hexagon
'h'	Hexagon

Matplotlib line styles

linestyle	description	usage
'-' or 'solid'	plots solid line	<code>plt.plot(x, y, ls='-')</code>
'--' or 'dashed'	plots a dashed line	<code>plt.plot(x, y, ls='--')</code>
'-.' or 'dashdot'	plots a dash-dotted line	<code>plt.plot(x, y, ls='-.'</code>
':' or 'dotted'	plots a dotted line	<code>plt.plot(x, y, ls=':')</code>
'', 'None' and ''	All draw nothing	<code>plt.plot(x, y, ls='')</code> <code>plt.plot(x, y, ls='None')</code> <code>plt.plot(x, y, ls='')</code>

Line Reference

Line Syntax	Description
'_'	Solid line
':'	Dotted line
'--'	Dashed line
'-.'	Dashed/dotted line

Color Reference

Color Syntax	Description
'r'	Red
'g'	Green
'b'	Blue
'c'	Cyan
'm'	Magenta
'y'	Yellow
'k'	Black
'w'	White