

### TO START

```
conda install matplotlib
import matplotlib.pyplot as plt
# to print graphs in notebooks
%matplotlib inline
```

### BASICS

#### FUNCTIONAL METHOD

<b>plt.plot(x,y)</b>	simple line plot
-plt.xlabel('str')	set x label
-plt.ylabel('str')	set y label
-plt.title('str')	set title
<b>plt.show()</b>	show plot
<b>plt.subplot(r,c,1)*</b>	create multiplots
plt.plot(x, y)	
<b>plt.subplot(r,c,2)</b>	
plt.plot(y, x, 'g*-')	

#### OBJECT ORIENTED METHOD (more control)

<b>fig = plt.figure()</b>	create canvas
<b>ax = fig.add_axes([0,0,1,1])</b>	create axes*
ax.plot(x, y, 'b')	create plot
ax.set_xlabel("str")	set x label
ax.set_ylabel("str")	set y label
ax.set_title("str")	set title

\*\* add more axis to have more figures

<b>fig, ax = plt.subplots(r,c)*</b>	subplots
axes[0].plot(x,y)	create pl ax1
axes[1].plot(x,y)	create pl ax2
axes[0].set_title('str')	set plot 1 title
axes[1].set_title("str")	set plot 2 title

**subplot()** command requires to specify the number of row and column we want to print the plots, and the third parameter specify what of the graph we are going to handle.

**axes:** ([left, bottom, width, height])

**fig, axes** allow you to auto-manage axis, you don't have to create them. Axes, now, will be an array of axis. We could use **for** loop to populate labels on axis.

### SIZE, SAVE, LEGEND

<b>plt.tight_layout()</b>	avoid overlap
plt.fig(figsize=(x,x))	set figuresize
plt.fig(figsize=(x,x), dpi=x)	set dpi
<b>fig.savefig("name.png")</b>	save figure
fig.savefig("name", dpi=200)	..and set dpi
ax.plot(x, y, label="str")	set legend
<b>ax.legend()</b>	show legend
ax.legend(loc=0)	best
ax.legend(loc=1)	upper right
ax.legend(loc=2)	upper left
ax.legend(loc=3)	lower left
ax.legend(loc=4)	lower right

**subplot()** command requires to specify the number of row and column we want to print the plots, and the third parameter specify what of the graph we are going to handle.

**axes:** ([left, bottom, width, height])

**fig, axes** allow you to auto-manage axis, you don't have to create them. Axes, now, will be an array of axis. We could use **for** loop to populate labels on axis.

### COLORS, LINEWIDTHS, LINETYPES

fig = plt.figure()	----
ax = fig.add_axes([0,0,1,1])	----
ax.plot(x,y	----
color='#xxxxxx',	set color
lw=x,	set linewidth
alpha=x,	set alpha
ls=","	set linestyle
marker=","	set markertype
markersize=x,	set marker size
markerfacecolor=","	set mark color
markeredgecolor=","	set external col
markeredgewidth=x)	set marker wdt
<b>ax.set_xlim([0,1])</b>	set x axes limit
<b>ax.set_ylim([0,1])</b>	set y axes limit
ax.plot(x, y, 'r--')	MATLAB style



By **DarioPittera** (aggialavura)

Not published yet.

Last updated 14th June, 2019.

Page 1 of 1.

Sponsored by **Readable.com**

Measure your website readability!

<https://readable.com>