MATPLOTLIB

- %matplotlib inline

  import matplotlib.pyplot as plt

  plt.plot([-1, -4.5, 16, 23])

  plt.show()

- import matplotlib.pyplot as plt

  plt.plot([-1, -4.5, 16, 23], "ob")

  plt.show()

character	description
'-'	solid line style
'--'	dashed line style
'-.'	dash-dot line style
':'	dotted line style
'.'	point marker
','	pixel marker
'o'	circle marker
'v'	triangle_down marker
'^'	triangle_up marker
'<'	triangle_left marker
'>'	triangle_right marker
'1'	tri_down marker
'2'	tri_up marker
'3'	tri_left marker
'4'	tri_right marker
's'	square marker
'p'	pentagon marker
'*'	star marker
'h'	hexagon1 marker
'H'	hexagon2 marker
'+'	plus marker
'x'	x marker
'D'	diamond marker
'd'	thin_diamond marker
'|'	vline marker
'_'	hline marker

```
import matplotlib.pyplot as plt
days = list(range(1,9))
celsius_min = [19.6, 24.1, 26.7, 28.3, 27.5, 30.5, 32.8, 33.1]
celsius_max = [24.8, 28.9, 31.3, 33.0, 34.9, 35.6, 38.4, 39.2]
plt.xlabel('Day')
plt.ylabel('Degrees Celsius')
plt.plot(days, celsius_min,
        days, celsius_min, "oy",
        days, celsius_max,
        days, celsius_max, "or")
plt.show()
```

Legend

```
# next line only needed if working with "ipython notebook":
%matplotlib inline
import numpy as np
import matplotlib.pyplot as plt
ax = plt.gca()
ax.plot([1, 2, 3, 4])
ax.legend(['A simple line'])
```

Bar Graph

- bars = plt.bar([1,2,3,4], [1,4,9,16])

  bars[0].set_color('green')

  plt.show()