

Matplotlib Tutorial: 6. Style Sheets

One common complaint against matplotlib is its relatively ugly default settings. Version 1.4 introduced a nice way to correct for this, using built-in style sheets.

Again, we'll start with the basic inline setting and imports:

```
In [1]: %matplotlib inline

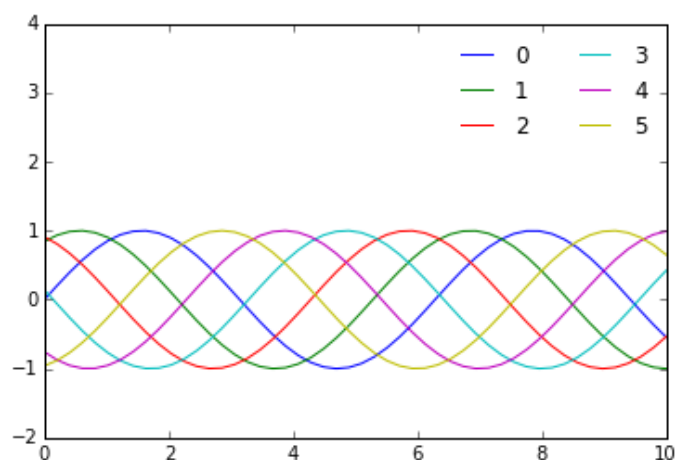
from __future__ import print_function, division
import matplotlib.pyplot as plt
import numpy as np
```

Recall that the default matplotlib plot looks something like this:

```
In [2]: x = np.linspace(0, 10)

def plot_curves():
    for i in range(6):
        plt.plot(x, np.sin(x + i), label=str(i));
    plt.ylim(-2, 4)
    plt.legend(ncol=2, frameon=False)

plot_curves()
```

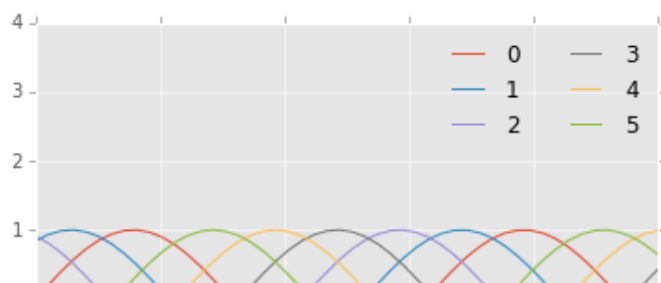


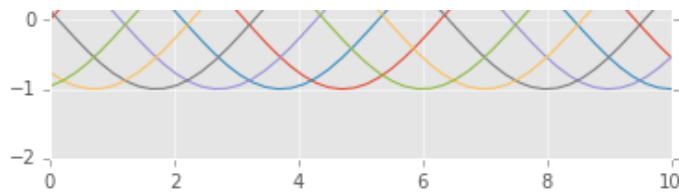
Ugly color combination, and ugly default plot.

Fortunately, in matplotlib 1.4 or newer, we can adjust the style with a single line:

```
In [3]: plt.style.use('ggplot')
```

```
In [4]: plot_curves()
```





Much nicer color choice, and much saner defaults!

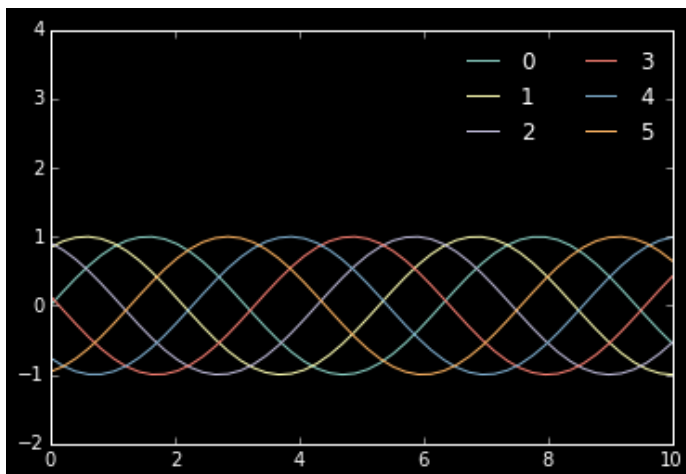
The available style sheets can be listed using the following:

```
In [5]: print(plt.style.available)
['grayscale', 'bmh', 'dark_background', 'fivethirtyeight', 'ggplot']
```

Let's take a look at each of these in turn. For each, we'll restore the defaults before activating them

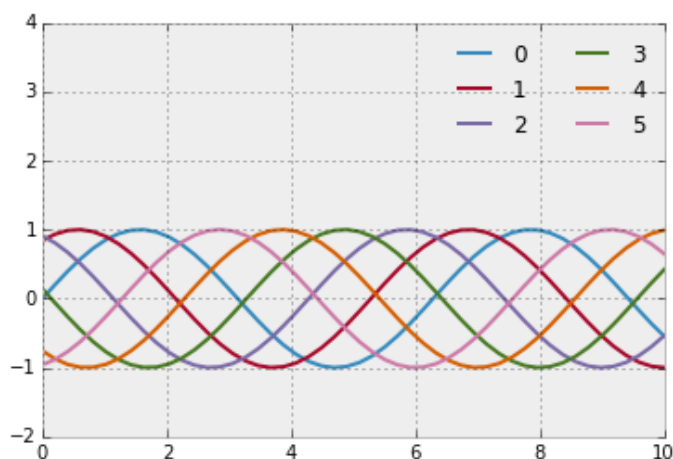
```
In [6]: # restore defaults
plt.rcdefaults()
%matplotlib inline

plt.style.use('dark_background')
plot_curves()
```



```
In [7]: # restore defaults
plt.rcdefaults()
%matplotlib inline

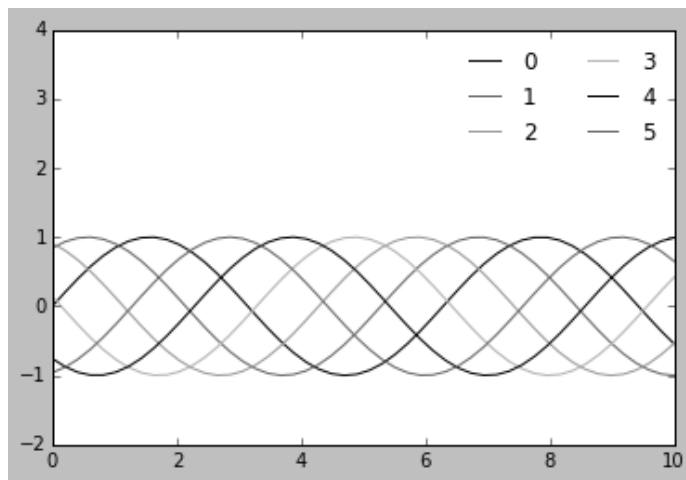
plt.style.use('bmh')
plot_curves()
```



```
In [8]: # restore defaults
```

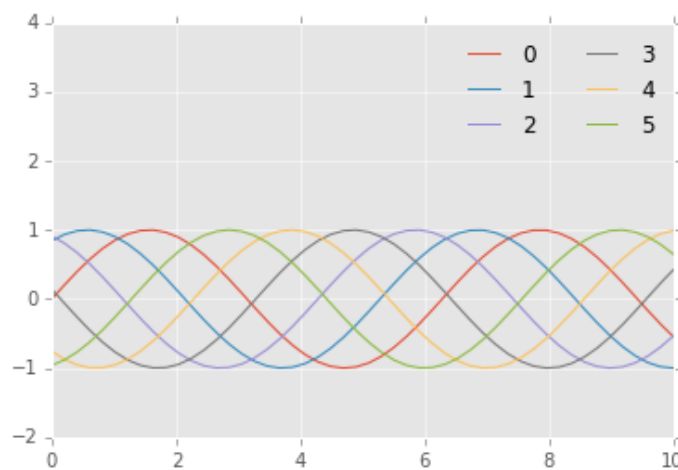
```
plt.rcParams()
%matplotlib inline

plt.style.use('grayscale')
plot_curves()
```



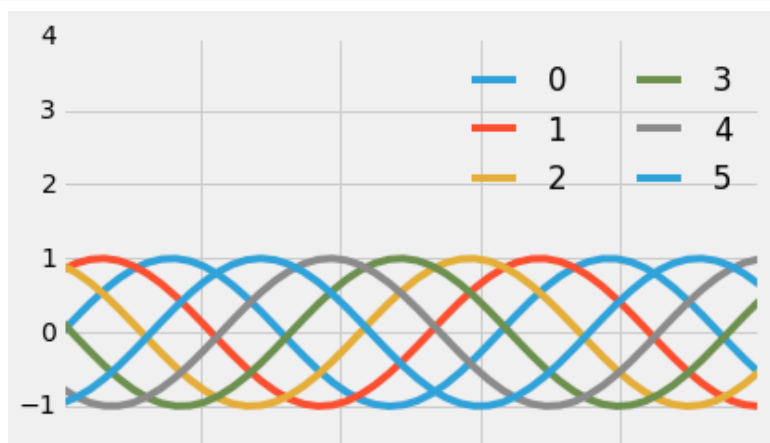
```
In [9]: # restore defaults
plt.rcParams()
%matplotlib inline

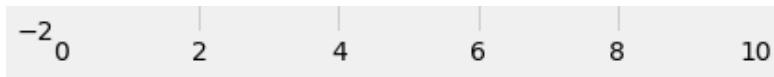
plt.style.use('ggplot')
plot_curves()
```



```
In [10]: # restore defaults
plt.rcParams()
%matplotlib inline

plt.style.use('fivethirtyeight')
plot_curves()
```





It is also possible to create your own stylesheets in this way; for more information see http://matplotlib.org/users/style_sheets.html
