

In [10]:

```
import numpy as np
import matplotlib.pyplot as plt
import scipy.interpolate as si
%matplotlib inline
```

Suppose we have some data

In [11]:

```
x = np.array([0,1,2,3,6,7,8,9])
y = np.array([1,1,1,1,0,0,0,0])
plt.plot(x, y, 'o', ms=20, clip_on=False)
plt.axis('off')
```

Out[11]:

(0.0, 9.0, 0.0, 1.0)



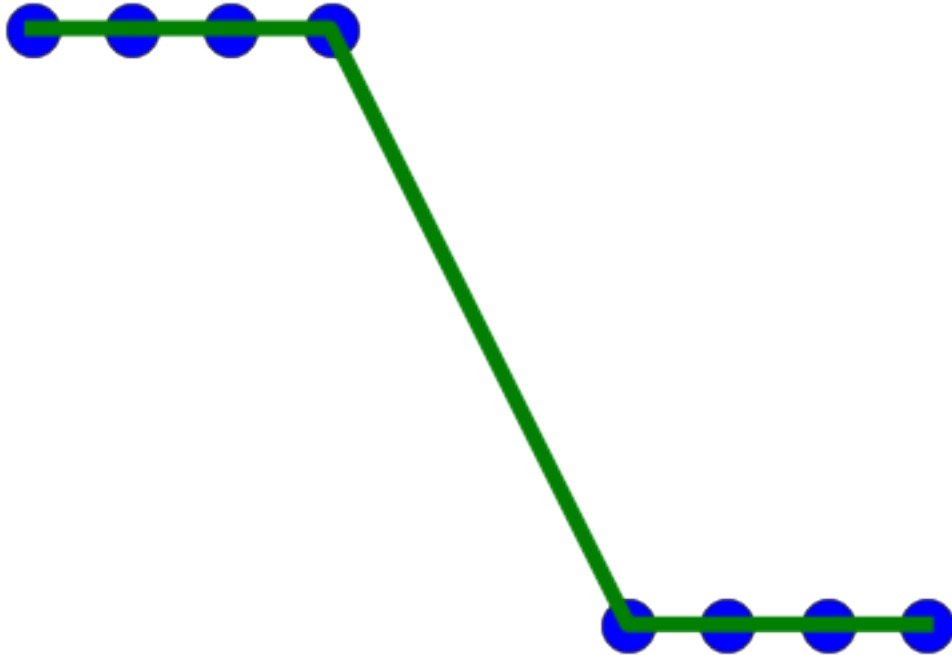
Should we connect the gaps with straight lines?

In [15]:

```
plt.plot(x, y, 'o', ms=20, clip_on=False)
plt.plot(x, y, 'g-', ms=20, clip_on=False, lw=6)
plt.axis('off')
```

Out[15]:

(0.0, 9.0, 0.0, 1.0)



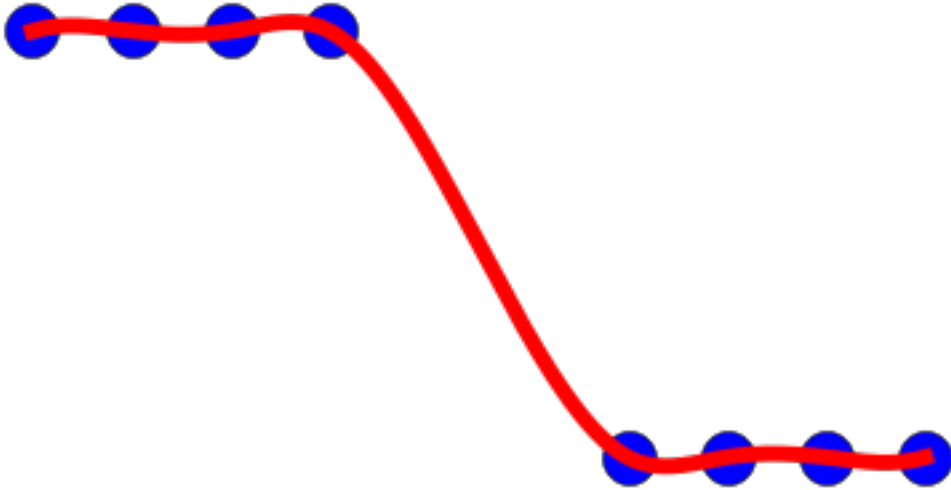
Or should we connect the gaps with something smoother?

In [18]:

```
f = si.interpld(x, y, kind='cubic')
xx = np.linspace(x.min(), x.max(), 1000)
plt.plot(x, y, 'o', ms=20, clip_on=False)
plt.plot(xx, f(xx), '-r', ms=20, clip_on=False, lw=6)
plt.axis('off')
```

Out[18]:

(0.0, 9.0, -0.20000000000000001, 1.2000000000000002)



In []: