Bootstrap Sampling

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0.0.1 Bootstrap Sampling

Below is an array of the possible values you can obtain from a die. Let's consider different methods of sampling from these values.

```
In [1]: import numpy as np
        np.random.seed(42)

        die_vals = np.array([1,2,3,4,5,6])
```

1. Take a random sample of 20 values from **die_vals** using the code below, then answer the question in the first quiz below.

```
In [2]: np.random.choice(die_vals, size=20)

Out[2]: array([4, 5, 3, 5, 5, 2, 3, 3, 3, 5, 4, 3, 6, 5, 2, 4, 6, 6, 2, 4])
```

2. Use the code below to choose another sample from **die_vals**, then answer the question in the first quiz below.

```
In [3]: np.random.choice(die_vals, replace=False, size=20)


        ---------------------------------------------------------------------------

        ValueError                                Traceback (most recent call last)

        <ipython-input-3-160315322c06> in <module>()
    ----> 1 np.random.choice(die_vals, replace=False, size=20)


        mtrand.pyx in mtrand.RandomState.choice (numpy/random/mtrand/mtrand.c:18113)()


        ValueError: Cannot take a larger sample than population when 'replace=False'
```