A FIRST LOOK AT “RANDOM VARIABLES"

Follow along in an IPython prompt.

We continue with our weather example.

```
> prob_space = {'sunny': 1/2, 'rainy': 1/6, 'snowy': 1/3}
```

We can simulate tomorrow's weather using the above model of the world. Let's simulate two different values, one (which we'll call `W` for "weather") for whether tomorrow will be sunny, rainy, or snowy, and another (which we'll call `I` for “indicator") that is 1 if it is sunny and 0 otherwise:

```
> random_outcome = comp_prob_inference.sample_from_finite_probability_space(prob_space)
> W = random_outcome
> if random_outcome == 'sunny':
>     I = 1
> else:
>     I = 0
```

Print out the variables `W` or `I` to see that they take on specific values. Then re-run the above block of code a few times.

You should see that `W` and `I` change and are random (following the probabilities given by the probability space).

This code shows something that's of key importance that we'll see throughout the course. Variables `W` and `I` store the values of what are called *random variables*.