

# Mathematical Function Features

- ◆ No Hysteresis — No History — No Memory
- ◆ “Idempotence”
- ◆ The results are always the same for a given argument  

```
>>> int("10f1", 16)  
4337
```
- ◆ Does not depend on anything that happened before



# Examples of Hysteresis

- ◆ Places where Python needs to diverge from the ideal...
- ◆ These are function-like
  - ◆ Function syntax applied to stateful objects

```
>>> from random import randint
>>> randint(1,6)
1
>>> randint(1,6)
5
```

```
>>> from os import getcwd
>>> getcwd()
'/Users/pha212/Documents/
Python'
```