## Alternate Styles

```
def syracuse2(n):

return n//2 if n\%2 == 0 else 3*n+1
```

syracuse3 = lambda n: n//2 if n%2 == 0 else 3\*n+1

## Functions as Object

```
def recurse_until(ending, the_function, n):
    yield n
    while not ending(n):
        n = the_function(n)
        yield n
```

- General-purpose high-order function for lots of fractal kinds of processing
- Requires two plug-in functions:
  - ending is a function to test to see if we're done, e.g.

```
lambda n: n==1
```

• the\_function is some form of the Syracuse function