

Successive Values

```
def syr_list(n):  
    seq = [n]  
    while n != 1:  
        n = syracuse(n)  
        seq.append(n)  
    return seq
```

- ◆ Not “wrong”
- ◆ Limited to always creating a sequence

Generator Functions

- ◆ Use the **yield** statement
- ◆ Act as an iterable
- ◆ Can be used in a **for** statement
 - ◆ Almost anywhere that a collection is used
- ◆ Won't create big list objects
- ◆ Lazy — they don't compute anything unless forced to by another function consuming results
 - ◆ `list(some_function())`
 - ◆ Builds a list object by consuming values from the generator