def syracuse(n):

    print(n)

    if (n==1):

        return 1

    elif (n%2 == 1):

        return syracuse(3\*n+1)

    else:

        return syracuse(n/2)

Base case: when n=1

Inductive case: if n!=1, then find out if it is even or odd.

AR on next page

