Mystery computation in Python

# Takes input n and computes output named result

import simplegui

# global state

max\_num = 1

iteration = 0

max\_iterations = 160

# helper functions

def init(start):

"""Initializes n."""

global n

n = start

print "Input is", n

def get\_next(current):

print "current",current

if (current%2) == 0:

return current/2

else:

return current\*3+1

# timer callback

def update():

"""??? Part of mystery computation."""

global iteration, n, max\_num

iteration += 1

# Stop iterating after max\_iterations

if iteration >= max\_iterations:

timer.stop()

print "max number is ", max\_num

else:

n = get\_next(n)

if n > max\_num:

max\_num=n

# register event handlers

timer = simplegui.create\_timer(1, update)

# start program

init(217)

timer.start()