**Prerequisite:**

* Completed Programming Assignment #1
* Program to identify 4 digit PINs (Personal Identification Numbers)

**Assignment:**

1. Extend your PIN Program to validate 6 digit PINs
   * The result should be to tell the user if the PIN is a good PIN   
     or if the PIN is an easy PIN to guess.
2. Read in the 6 digit user PIN as a string or a list (your choice)
   * i.e. use pinNumber = str(input(“Enter a PIN”))
3. Check that the PIN is valid
   * Check that there are no letters
   * Check that there are no spaces or punctuation marks
   * Leading zeroes are valid and significant (e.g. “000001” is a valid PIN)
4. Check for the use of simple patterns (e.g. “111111”)
5. Check for the use other common patterns (e.g. birthdays, etc.)
6. Print out a PIN analysis summary
   * That the PIN is valid or invalid
   * If the PIN is easy or hard to guess

import time

startTime = time.time()

myNumber = str(input("Enter a 6 digit PIN:"))

numberlen = len(myNumber)

pin = int(myNumber)

while(numberlen != 6):

print('Your PIN is too long or too short')

myNumber = str(input("Enter a 6 digit PIN again:"))

numberlen = len(myNumber)

easyNumbers = [111111, 222222, 333333, 444444, 555555, 666666, 777777, 888888, 999999, 000000, 123456, 654321, 200400]

while(pin in easyNumbers):

print("Your PIN is too easy to guess!")

pin = int(input("Please enter a stronger PIN!:"))

else :

count = 1

while (True) :

print ("Your Pin is", count)

if (count >= pin) :

break

else :

count = count + 1

endTime = time.time()

print("Elapsed time is:", (endTime - startTime))