**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

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

legalPin = True

if len(pin) != 6:

legalPin = False

print("The pin is not 6 digits long")

for i in range(0, len(pin)):

if not pin[i].isdigit():

legalPin = False

print(pin[i] , "is not a number")

for i in range(1, len(pin)):

if pin[i] != pin[0]:

break

if i == len(pin)-1:

legalPin = False

print("This PIN is too simple, make a more complex one")

illegalList = (123456, 654321, 111111, 222222, 333333, 444444, 555555, 666666, 777777, 888888, 999999, 987654, 000000)

if (pin in illegalList):

legalPin = False

print("This PIN is too simple, make one that is difficult to crack")

if legalPin == True:

print("This PIN is good, it is a complex combination")