**Prerequisite:**

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

**Assignment:**

* 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.
* Read in the 6 digit user PIN as a string or a list (your choice)
* i.e. use pinNumber = str(input(“Enter a PIN”))
* 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)
* Check for the use of simple patterns (e.g. “111111”)
* Check for the use other common patterns (e.g. birthdays, etc.)
* 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()

loopCount = 1

numberOne = input("Please enter the first number: ")

if (numberOne != 0) or (numberOne != 2) or (numberOne != 3) or (numberOne != 4) or (numberOne != 5) or (numberOne != 6) or (numberOne != 7) or (numberOne != 8) or (numberOne != 9):

print ("That isn't valid")

else :

print ("That is vaild")

numberTwo = input("Please enter the second number: ")

if (numberTwo != 0) or (numberTwo != 2) or (numberTwo != 3) or (numberTwo != 4) or (numberTwo != 5) or (numberTwo != 6) or (numberTwo != 7) or (numberTwo != 8) or (numberTwo != 9):

print ("That isn't valid")

else :

print ("That is vaild")

numberThree = input("Please enter the third number: ")

if (numberThree != 0) or (numberThree != 2) or (numberThree != 3) or (numberThree != 4) or (numberThree != 5) or (numberThree != 6) or (numberThree != 7) or (numberThree != 8) or (numberThree != 9):

print ("That isn't valid")

else :

print ("That is vaild")

numberFour = input("Please enter the fourth number: ")

if (numberFour != 0) or (numberFour != 2) or (numberFour != 3) or (numberFour != 4) or (numberFour != 5) or (numberFour != 6) or (numberFour != 7) or (numberFour != 8) or (numberFour != 9):

print ("That isn't valid")

else :

print ("That is vaild")

numberFive = input("Please enter the fifth number: ")

if (numberFive != 0) or (numberFive != 2) or (numberFive != 3) or (numberFive != 4) or (numberFive != 5) or (numberFive != 6) or (numberFive != 7) or (numberFive != 8) or (numberFive != 9):

print ("That isn't valid")

else :

print ("That is vaild")

numberSix = input("Please enter the sixth number: ")

if (numberSix != 0) or (numberSix != 2) or (numberSix != 3) or (numberSix != 4) or (numberSix != 5) or (numberSix != 6) or (numberSix != 7) or (numberSix != 8) or (numberSix != 9):

print ("That isn't valid")

else :

print ("That is vaild")

userPin = [numberOne, numberTwo, numberThree, numberFour, numberFive, numberSix]

pin = ("".join(userPin))

pin = int(pin)

if (pin == 1111):

print ('\u001b[36m'"Your pin is 11111")

print ("This was easy to guess!")

if (pin == 100000) :

print ('\u001b[36m'"Your pin is 100000")

print ("This was easy to guess!")

if (pin == 123456) :

print ('\u001b[36m' "Your pin is 123456")

print ("This was easy to guess!")

if (pin == 102004) :

print ('\u001b[36m'"Your pin is 102004")

print ("This was easy to guess!")

if (pin == 9999999) :

print ('\u001b[36m'"Your pin is 2000")

print ("This was easy to guess!")

if (pin == 666666) :

print ('\u001b[36m'"Your pin is 6666")

print ("This was easy to guess!")

if (pin == 000000) :

print ('\u001b[36m'"Your pin is 3000")

print ("This was easy to guess!")

if (pin == 121212) :

print ('\u001b[36m'"Your pin is 4000")

print ("This was easy to guess!")

else :

print ("Your pasword is secure")

count = 1

while (True) :

count = count + 1

print ('\u001b[36m'"Get ready", count + 1)

if (count >= pin) :

break

else :

count = count + 1

print ("Your pin is",pin)

endTime = time.time ()

print('\u001b[31m'"Elapsed time is:", (endTime - startTime))