**TReport for password generator using python**

Task- To make a random password generator using python which would generate a password in this sequence- word, number, alpha numerical, word, number, alpha numerical.

Bill of materials-

* Computer running windows, Linux or MacOS
* Visual studio code: <https://code.visualstudio.com/download>
* Text file containing random words
* Text file containing random alpha numerical characters

Resources used-

* Tutorial for python on YouTube (to learn how to use text files in python): <https://www.youtube.com/watch?v=rfscVS0vtbw>
* Tutorial on how to present something in a pop-up dialogue box in python: <https://www.youtube.com/watch?v=4McKSuuUQ-0>
* Text file containing random words from GitHub: <https://raw.githubusercontent.com/dwyl/english-words/master/words.txt>
* Geek for geek to learn how to use a function to call a random number between and including two numbers- <https://www.geeksforgeeks.org/python-randint-function/>
* Used kite.com to learn how to remove a trailing new line in python- https://www.kite.com/python/answers/how-to-remove-a-trailing-newline-in-python

Summary - To make this program I first took 2 text files (in .txt format), one containing a list of 450,000+ English words and the second containing a list of common alpha numerical characters found on a ‘qwerty’ keyboard. My python script converts and stores these texts files in 2 different lists. The code takes a word randomly out of a list and performs string concatenation inside a variable called password ], after that a random number is generated between (and including) 0-9, then the number is converted to a string and string concatenation is performed again inside the variable ‘password’; lastly, an alphanumerical number is randomly taken from the list and concatenated at the end of the value which is stored in the variable called ‘password’. This procedure is done twice so that we can get the password in the specified format. The password will then finally be presented in a pop-up dialogue box

Code-

import random

from tkinter import \*

from tkinter import messagebox

def numbers\_pass(password):

number=random.randint(0,10)

number=str(number)

password=password+number

return password

def words\_pass(listofwords,password):

word\_index=random.randint(0, 466550)

word= listofwords[word\_index].rstrip("\n")

password=password+word

return password

def alpha\_pass(listofalpha, password):

alpha\_index=random.randint(0,32)

alpha=listofalpha[alpha\_index].rstrip("\n")

password=password+alpha

return password

word\_file= open("words.txt", "r")

alpha\_file=open("alphanumericals.txt", "r")

content\_word=word\_file.readlines()

content\_alpha=alpha\_file.readlines()

password = ""

for i in range (0,2):

password=words\_pass(content\_word, password)

password=numbers\_pass(password)

password=alpha\_pass(content\_alpha, password)

window= Tk()

window.eval('tk::PlaceWindow %s center' % window.winfo\_toplevel())

window.withdraw()

messagebox.showinfo('Password-', password)

window.deiconify()

window.destroy()

window.quit()

word\_file.close()

alpha\_file.close()