ITP 125 – Homework 06

Deadline

1 minute before the next class.

Objective

Let’s use Python to solve world problems

Procedure

1. Review the problem from the following site:

<https://projecteuler.net/problem=3>

Write a Python script that solves this problem. You may talk with anyone to help find the solution. You may refer to the previous question to figure out the answer. Name this file “hw06a.py”.

**Note:** If for any reason you do not finish. You will still get credit if you try.

1. Review the problem from the following site:

<https://projecteuler.net/problem=4>

Write a Python script that solves this problem. You may talk with anyone to help find the solution. You may refer to the previous question to figure out the answer. Name this file “hw06b.py”.

**Note:** If for any reason you do not finish. You will still get credit if you try.

1. Last week’s asshat thing to do was creating a bomb.bat file. This week lets bomb the hard drive by using a zip bomb.

Read the following Wikipedia page:

<http://en.wikipedia.org/wiki/Zip_bomb>

You can create one on your own if you have access to a \*nix system, but you can also download the a zip bomb from the following site:

<http://www.unforgettable.dk/>

Or Blackboard/Google Drive.

Test it by unzipping the file inside a virtual machine. You’ll notice all the free space inside the machine is going to be eaten up. Remember the password is 42. Hmm. Did it work? Is there a modern day version of a zip bomb that can work?

**Modern day decompressing softwares will detect this kid of deep recursion and terminate if too many recursive calls are being formed to prevent this. This is possible if instead of a single deep recursive call, have a program that will spawn more programs that will spawn more programs. This way each program is a unique call and is harder to detect.**

Submission

After you are done with answering the questions, name the file **hw06a.py (**for the first challenge)**, hw06b.py** (for the second challenge)**, and hw06c.docx** (for the answers to the question) then encrypt each file using **Veracrypt**, and. Upload the file to your **itp125 folder** on the web hosting.

Set the password to be **whysomucherrors**

Make sure you can see the file by publicly accessing the URL using any web browser of your choosing.

Refer to lab 1 if you are having any issues.