Fall 2021CIS 3362 Week One AssignmentAssigned: 8/23/2021Due: 8/27/2021(via Webcourses)
For questions 1 -3 decode each message. The techniques used to encrypt the messages are given in parentheses right before the cipher text. In your write-up, explain the process you used to decrypt and include any code you might have used as an aid. Pleasedo not use websites that automatically solve ciphers as most of your grade will be based on your description of the decryption process and original codeyou include in your write up.
1) (shift) hspytyczxpozldespczxldoz
WHENINROMEDOASTHEROMASDO

So, I just wrote a brute force python script to just print out all 26 possible decrypted texts and just look to see which one is correct.  I mean, why not right?

2) (shift)
yvmuqhuqbbsqkjyekiisxeebmybbdejweedbyduqdtmumybbqbbxqluqrujju
hunfuhyudsu
IFWEAREALLCAUTIOUSSCHOOLWILLNOTGOONLINEANDWEWILLALLHAVEABETTE
REXPERIENCE

This is the same as question one, just try everything and see what sticks.

3) (affine)
fxgksxfxcayclxivoawgviwofxfxobfxiaxcnfgbreovirofcpirewcbgvyxo
bsixoafgtiollrcidfgfxiygdifglvcbfgkforrlgaactcrcfcia
thoughthiscipherasmoremaththantheshiftonlyarelativelyminorcha
ngehastobeappliedtothecodetoprintoutallpossibilities
c = 5, b = 12

I wrote a python script for this one too and it took way
longer than I expected, mostly because I am an idiot.  This
script is also a brute force but I added logic to check if
there were valid words in the text the algorithm has worked
on.  This narrows it down so I dont have to scroll through
312 possible key combo decryptions.  It took me a long time
to write the code for this because I was having issues
reading from the text file with a list of common words.  Now
it works and Im glad I added the logic so I can reuse this
code later, even if it did take like 5 times as long.

4) Using the affine cipherwith theencryption keys a = 15 and b = 6, encrypt the following
plaintext:tyingforsixteenthwithcornelluniversityinusnewsandworl
dreportspublicationmostinnovativeschoolscategoryucfisfloridas
toprankedschoolforinnovation
fcwtsdibqwnfootfhywfhkibtopputwjobqwfcwtuqtoyqgtzyibpzboxibfq
xuvpwkgfwiteiqfwttijgfwjoqkhiipqkgfosibcukdwqdpibwzgqfixbgtao
zqkhiipdibwttijgfwit

Again, a python script, I mean, its so easy to just make the
computer do this math (I dont enjoy doing math by hand).  All
I did was take in the text and keys at the command line and
just run the encryption algorithm.


Files to Submit
Please submit a .pdf, .doc or .docx file with your write up describing how
you broke each cipher (1-3). If you write any programs, you may either
include the text of theprogram inthe write up or attach those programs
as separate .java, .c or .py files.