

CECS 478 Assignment #2 - Substitution Ciphers

Due Date: 15 FEB 2018

20 points

Assignment Description. This assignment is designed to allow you to get some practice with cryptanalysis of substitution ciphers. Write a program that decrypts the following encrypted quotations. You may use any programming language that you like for your submission, but I recommend using something that is easy to manipulate text like *Python*.

1. fqjcb rwjwj vnjax bnkhj whxcq nawjv nfxdu mbvnu ujbbf nnc
2. ocmz vmzor jocdi bnoyv dhvod igdaz admno ojbzo rcvot jprvi oviyv aozmo cvooj ziejt dojig toczr dznzo jahvi fdyiv xcdzq zoczn zxjiy
3. ejitp spawa qleji taiul rtwll rfirl laoat wsqqj atgac kthls iraoa twlpl qjatl jufhr lhuts qataq itats aittk stqfj cae
4. iyhqz ewqin azqej shayz niqbe aheum hnmnj jaqii yuexq ayqkn jbeuq iihed yzhni ifnun sayiz yudhe sqshu qesqa iluym qkque aqam oejjs hqzyu jdzqa diesh nznj jayzy uihqz vayzq shsnj jejjz nshna hnmty isnae sqfun dqzew qiead zevqi zhnj shqze udqai jrmtq uishq ifnun siiqa suoj qqfni syyle iszhn bhmei squih nimnx hsead shqmr udquq uaqeu iisque jshnj oihyy snaxs hqihe lsilu ymhni tyz

Honors Students. Along with the above assignment, you must also include a mechanism in your code to enter in a given key and decrypt a given phrase using that shared key.

Additionally, you must write a second program that takes the following phrases and encrypts them using a substitution cipher. Like the above program, your second program should ask for a key and a phrase and then proceed to encrypt that phrase using the given shared key. Make sure that you give me the key for the cipher that you use and the output of encrypted phrases.

1. He who fights with monsters should look to it that he himself does not become a monster. And if you gaze long into an abyss, the abyss also gazes into you.
2. There is a theory which states that if ever anybody discovers exactly what the Universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable. There is another theory which states that this has already happened.
3. Whenever I find myself growing grim about the mouth; whenever it is a damp, drizzly November in my soul; whenever I find myself involuntarily pausing before coffin warehouses, and bringing up the rear of every funeral I meet; and especially whenever my hypos get such an upper hand of me, that it requires a strong moral principle to prevent me from deliberately stepping into the street, and methodically knocking people's hats off - then, I account it high time to get to sea as soon as I can.

Kudos if you can tell me who said these quotes without searching the Internet for them.

Deliverables. Submit your source code to Beachboard along with the decrypted phrases. *Do not compress your files for submission.* Make sure that all code is **commented** with your own explanations or it will not be graded.