**Assignment 2**

***Program the following problem using python:***

The Caesar cipher is an encryption algorithm. It encrypts letters by shifting them over by a certain number of places in the alphabet. The length of shift is called the **key**. For example, if the key is 3, then A becomes D, B becomes E, C becomes F, and so on. To decrypt the message, you must shift the encrypted letters in the opposite direction.

You are asked to write a program that can hack messages encrypted with the above algorithm, even if you don’t know the key. There are only 26 possible keys for this algorithm, so a com­puter can easily try all possible decryptions and dis­play the results of all the used keys to the user.

You have a (txt) file containing different messages, you are asked to decrypt the messages with the 26 keys and write them in to a file.

*Note: Ignore any punctuation mark.*

***Output sample:***

The message before decryption:

> **QIIX QI FC XLI VSWI FYWLIW XSRMKLX.**

The decrypted message for different keys:

Key #0: QIIX QI FC XLI VSWI FYWLIW XSRMKLX.

Key #1: PHHW PH EB WKH URVH EXVKHV WRQLJKW.

Key #2: OGGV OG DA VJG TQUG DWUJGU VQPKIJV.

Key #3: NFFU NF CZ UIF SPTF CVTIFT UPOJHIU.

Key #4: MEET ME BY THE ROSE BUSHES TONIGHT.

Key #5: LDDS LD AX SGD QNRD ATRGDR SNMHFGS.

Key #6: KCCR KC ZW RFC PMQC ZSQFCQ RMLGEFR..

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