## Decryption of a Caesar Cypher in Linux

## Project description

File in need of decryption through Linux Command Line.

## Read File name Ceasar

```
Q1.encrypted README.txt caesar
analyst@23cf678cb33f:~$ cat README.txt
Hello,
All of your data has been encrypted. To recover your data, you will need to solve a c
ipher. To get started look for a hidden file in the caesar subdirectory.
analyst@23cf678cb33f:~$ cd ceasar
-bash: cd: ceasar: No such file or directory
analyst@23cf678cb33f:~$ cd caesar
analyst@23cf678cb33f:~/caesar$ ls -a
  .. .leftShift3
analyst@23cf678cb33f:~/caesar$ cat .leftShift3
Lq rughu wr uhfryhu brxu ilohv brx zloo qhhg wr hqwhu wkh iroorzlqj frppdqg:
rshqvvo dhv-256-fef -senqi2 -d -q -lq T1.hqfubswhq -rxw T1.uhfryhuhq -n hwwxeuxwh
analyst@23cf678cb33f:~/caesar$ cat .leftShift3 | tr "d-za-cD-Za-C" "a-zA-Z"
tr: range-endpoints of 'a-C' are in reverse collating sequence order
analyst@23cf678cb33f:~/caesar$ cat .leftShift3 | tr "d-za-cD-ZA-C" "a-zA-Z
In order to recover your files you will need to enter the following command:
openssl aes-256-cbc -pbkdf2 -a -d -in Q1.encrypted -out Q1.recovered -k ettubrute
analyst@23cf678cb33f:~/caesar$ cd ~
analyst@23cf678cb33f:~$ openssl aes-256-cbc -pbkdf2 -a -d -in Q1.encrypted -out Q1.re
covered -k ettubrute
analyst@23cf678cb33f:~$ cat Q1.recovered
If you are able to read this, then you have successfully decrypted the classic cipher
text. You recovered the encryption key that was used to encrypt this file. Great wor
\mathbf{k}!
analyst@23cf678cb33f:~$
```

Text instructed to solve a cipher in a hidden file. I used the command cd to find the hidden file .leftShift3. Then I used the cat command to read the hidden file. Then I used the tr command to translate the encrypted text to plaintext. Utilizing the name of the hidden file as my key "left shift 3". The decrypted file then gave me the necessary command prompt to recover my files. Once the command is input into the command line the message read "If you are able to read

this, then you have successfully decrypted the classic cipher text. You recovered the encryption key that was used to encrypt this file. Great work!".

## Conclusion

Utilizing clues to the encrypted text and utilizing command prompts to read and translate text helped lead to the decrypted cipher.