Back story:

There was this girl you’ve been crushing on since middle school, and there was nothing you could’ve done about your feelings because she seen you as a brother. So, one day you decided to write an artificial intelligence (AI) that would help you to get with her. The AI analyzed text from your crush and suggested messages to text back to her. After few weeks of using your AI you’ve finally gotten with her.

After a week of socializing with her you realized something, and that was your conversation is not as private as you thought; Apple might be able to intercept your conversation. So, you decided to write an app that you can truly trust. The app will use end-to-end encryption to provide extra privacy, but there was a problem, you’ve never written a crypto program; which meant your cipher wasn’t really strong.

Write a crypto program; the program must use substitution cipher to encrypt and decrypt data.

1. Your program must ask the user for the message
2. Your program must then ask the user if they want to encrypt or decrypt
3. Your program should then run the proper function and display to user the output

Hints:

MUST WATCH: https://www.youtube.com/watch?v=1P8Xpxm76e8

You are writing a program that will loop through every letter in the message and replace each letter with something.

Example Sample:

encryption\_map = { “a”: “r”, “b”: “e” … }

decryption\_map = { “r”: “a”, “e”: “b” … }

def encrypt(text):

encrypted\_data = “” # where our new letters will be stored

for letter in text:

letter = letter.lower()

if letter in encryption\_map:

subs\_letter = encryption\_map[letter]

encryption\_data += sub\_letter # adding strings

else:

encryption\_data += sub\_letter # adding strings

return encrypted\_data