Name:_____

Introduction to Cryptography
One-Time Pad

Answer the following questions.

(1) A one-time pad is an encryption technique that adds a different key to each letter. For example, if the plain text message that we wish to encrypt is $DOLPHIN$, and we use a one time pad of $XYHSNET$, then we compute $D + X$, $O + Y$, $L + H$, $P + S$, $H + N$, $I + E$, and $N + T$ to obtain an encrypted message $AMSHUMG$. The one-time pad must be at least as long as the message.

Implement a program in Python that

(a) takes a plaintext message in a string;
(b) takes a one-time pad in a string;
(c) prints the encrypted ciphertext obtained by adding each letter of the plaintext message to the corresponding letter in the one-time pad.