

CS 100 Exercise 10: Encryption
Summer 2001
Due in lecture, Tuesday July 24

Name: _____ **CUID:** _____

1. Encryption

In Project 1, you will be implementing a simple substitution encryption algorithm. This exercise will give you a chance to work out an example by hand. If you do not understand how the encryption works, please ask one of us for help! (It's very difficult to write a program to do something that you yourself do not know how to do).

For each of the following messages, use the specified substitution string to generate the encrypted ciphertext.

Romeo to Juliet:

Substitution string: "zyxwvutsrqponmlkjihgfedcba"

Plaintext: But hark, what light through yonder window breaks?

Ciphertext: _____

Juliet to Romeo:

Substitution string: "qwertyuiopasdfghjklzxcvbnm"

Plaintext: A rose by any other name would smell as sweet.

Ciphertext: _____

Romeo to Juliet:

Substitution string: "poiuytrewqlkjhgfdsamnbvcxz"

Plaintext: It is the east, and Juliet is the sun!

Ciphertext: _____

Juliet to Romeo:

Substitution string: "mnbvcxzlkjhgfdsapoiuytrewq"

Plaintext: Be but sworn my love, and I'll no longer be a Capulet.

Ciphertext: _____