(1) Encrypt the phrase "HELLO WORLD" using Caesar Cipher with a 12-character shift.

(2) A ciphertext under encryption by Caesar Cipher becomes "KITKCTCA". Decode.

(3) Consider the following sentence:

Pierre de Fermat is a French mathematician who is often called the
founder of the modern theory of numbers.

Encrypt the passage using the Substitution Cipher with key word "SAN FRANCISCO" and key letter "X".

(4) Decode a Substitution Cipher sheet.

(5) What can you say about the practicality of the simple substitution cipher? (easy to encode/decode?)

(6) What can you say about the security of simple substitution cipher (is it easy to break?) What techniques have you learned today about breaking the cipher?

(7) Is there any way you can make this encryption scheme more secure?