To briefly understand the concept of simple substitution is simple, first the cipher receives a plaintext and then replaces letters in the plaintext to other coordinated letters thus creating a ciphertext. There are over 26! Keys to try for the substitution creator to choose from and so cracking will take some time. Although, using letter frequency analysis the attacker is able to count the numbers of letters which frequently appear and then replace them with frequent letters found in the language.

I was unable in cracking the cipher code since I had only 4 letters of which only one appeared more then others. L appears 2 times in HELLO of which the algorithm was able to count which of the ciphertexts letters JCFFZ appeared more often which is E and then convert that letter to E since it is most common in english language. However, the ciphertext could not be cracked to an understandable level since the ciphertext of HELLO became JCFFZ of which JCZ only appear once each, able to only crack to JCEEZ after using letter freq analysis. A cipher with 10 texts was also not able to fully crack to understandability levels but to a brief hint at the true plaintext. For me, having 26/2 = 13 letters, I was able to get a variety of letters and be a true understandable level.