

I first calculated which position the spaces in the first ciphertext are located with a high probability, by XORing the ciphertext with all the other ciphertexts and in each iteration counting the occurrences of letters in each position of the XORd ciphertexts, such that once C1 has been XORd with all the other ciphers, one can determine with high probability the positions of each individual space and thus the likely length of each word in the plain text. If it's a space, then the characters at that position in the pairwise XORed plaintexts will be either letters (if the character at that position in the other plaintext is a letter) or nulls (if both of the characters are spaces)

I then populated 'output' with all asterisks and put a space in each position that the program determined had a high probability of having a space.

Then I finally XORd the second ciphertext argument with the first, and crib dragged the inputted guess along the entire XORd array. From there it was just a matter of guessing the right words with the right # of letters.

Figuring out the spaces was only half the work, I pulled up a list of the most common words in English and just went from there. I first guessed " The " and a bunch of other prepositions until the output started to be in readable English and I kept going until most of the asterisks were gone, then I was able to finally correctly guess the quote from cipher2: "Of course there is no formula for success except perhaps an ". which then outputted the correctly decrypted cipher1 quote: "As long as we are children we have the ability to experience"