**Substitution Cipher**

The approach I took solving this cipher was to use letter frequencies. I first used the most common English alphabets. Then after rearranging them to make a bit more sense in the cipher. Then I used the most common digraphs to solve the cipher further. From there it was trial and error until I recognized the phrase.

**Vigenère Cipher**

First I needed to get the key length and that was obtained by using a Kasiski analysis. This allowed me to get the key length. After that I used frequency analysis but this time it was a bit different. I first made groups by splitting the cipher text into groups based on what position of the key they belonged too. So all cipher letter which would aligned with the position of L1 (first position in the cipher text and every 5 spots over) would be collected into a group. Then using that I found frequencies of each groups letters within themselves. From there I aligned those frequencies with the English letter frequencies until I was able to produce the largest number possible. This would indicate that the proper alignment had been found. From their I had the key and deciphered the text.

**RSA Cipher**

For this cipher I simply factored n and then find both p and q. I then used both of them to get phi. After which I found my private key for decrypting. Then I decrypted each number and found the 3 letters that made up the number by reversing the math that was used to encode it.