

很奇怪的题目

ida看不出来是什么鬼，看样子是跟传统的32位程序传参不一样，所以决定动调来调一遍

动调时发现首先对输入的flag与SWPU_2019_CTF进行循环异或

然后用sub_4025c0函数进行加密（这个函数很长很奇怪，所以需要循环看最终的结果，发现前面一堆奇奇怪怪的垃圾代码，最终是将flag跟特定值key2进行异或

```
key1 = list(b'SWPU_2019_CTF')
len_k1 = len(key1)
result=[0xB3,0x37,0x0F,0xF8,0xBC,0xBC,0xAE,0x5D,
        0xBA,0x5A,0x4D,0x86,0x44,0x97,0x62,0xD3,
        0x4F,0xBA,0x24,0x16,0x0B,0x9F,0x72,0x1A,
        0x65,0x68,0x6D,0x26,0xBA,0x6B,0xC8,0x67]

key2 = [ 0x86, 0x0C, 0x3E, 0xCA, 0x98 ,0xD7 ,0xAE, 0x19 ,0xE2, 0x77, 0x6B ,0xA6 ,0x6A, 0xA1 ,0x7
for i in range(len(key2)):
    result[i]^= key2[i]
    result[i]^= key1[i%13]
print(bytes(result))
```