

```

[-] d000f9f47dbed32f6167bd81b85696db
[-] c010e9e46daec33f7177ad91a84686cb
[#] Detecting Block 2 -- Done!
[#] The IValue2 is: c010e9e46daec33f7177ad91a84686cb
[#] The M2 is: 412e203d290b0b0b0b0b0b0b0b0b0b0b
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Connection closed successfully.
[!] The Intermediary Value is: c66a6ab56818c74792257eea8f0cf616c010e9e46daec33f7177ad91a84686cb
[!] The M is: 5961792120596f752067657420616e20412e203d290b0b0b0b0b0b0b0b0b0b

In [1]: from Crypto.Util.number import long_to_bytes
In [2]: a = long_to_bytes(int("5961792120596f752067657420616e20412e203d290b0b0b0b0b0b0b0b0b",16))
In [3]: a
Out[3]: b'Yay! You get an A. =)\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b\x0b'

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1  from oracle import *
2  from Crypto.Util import strxor
3  import re
4
5  C =
6      '9F0B13944841A832B2421B9EAF6D9836813EC9D944A5C8347A7CA69AA34D8DC0DF70E343C400
7      0A2AE35874CE75E64C31'
8
9  BLOCK = 2
10 C = re.findall('.{ ' + str(len(C) // (BLOCK + 1)) + '}', C)
11
12 Oracle_Connect()
13 M = []
14 IVALUE = []
15 for b in range(BLOCK):
16     print('[*] Detecting Block', b+1)
17     IV = C[b]
18     Ivalue = []
19     iv = '00000000000000000000000000000000'
20     iv = re.findall('.{2}', iv)[: -1]
21     padding = 1
22
23     for l in range(16):
24         print(" [+] Detecting IVALUE's last", l + 1 , 'block')
25         for ll in range(l):
26             iv[ll] = hex(int(Ivalue[ll], 16) ^ padding)[2:].zfill(2) #更新 iv
27
28         for n in range(256):
29             iv[l] = hex(n)[2:].zfill(2)
30             data = ''.join(iv[: -1]) + C[b + 1]
31             ctext = [(int(data[i:i + 2], 16)) for i in range(0, len(data),
32 2)]
33
34             while True:
35                 try:
36                     rc = Oracle_Send(ctext, 2)
37                     break
38                 except:
39                     print("reconnect")
40                     Oracle_Connect()
41
42             print("")
43             if rc != 48:

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39         Ivalue += [hex(n ^ padding)[2:].zfill(2)]
40         break
41
42     print('\n    [-]', ''.join(iv[::-1]))
43     print('    [-]', ''.join(Ivalue[::-1]))
44
45     padding += 1
46
47     Ivalue = ''.join(Ivalue[::-1])
48     IVALUE += [Ivalue]
49
50     m = re.findall('[0-9a-f]+', str(hex(int(IV, 16) ^ int(''.join(Ivalue),
51 16))))[1]
52     M += [m]
53
54     print('[#] Detecting Block', b + 1, '-- Done!')
55     print('[#]', 'The IValue' + str(b + 1), 'is:', Ivalue)
56     print('[#]', 'The M' + str(b + 1), 'is:', m)
57     print('-' * 50)
58
59 Oracle_Disconnect()
60
61 print('[!] The Intermediary Value is:', ''.join(IVALUE))
62 print('[!] The M is:', ''.join(M))

```