导入符号
用CE寻找切入点
分析算法
写出注册机
校验结果

【软件名称】：Dope2112.2.exe

【软件大小】：171kb

【下载地址】：自行搜索下载

【加壳方式】：无壳

【保护方式】：Name/Serial

【编译语言】：Delphi

【调试环境】：W10 64

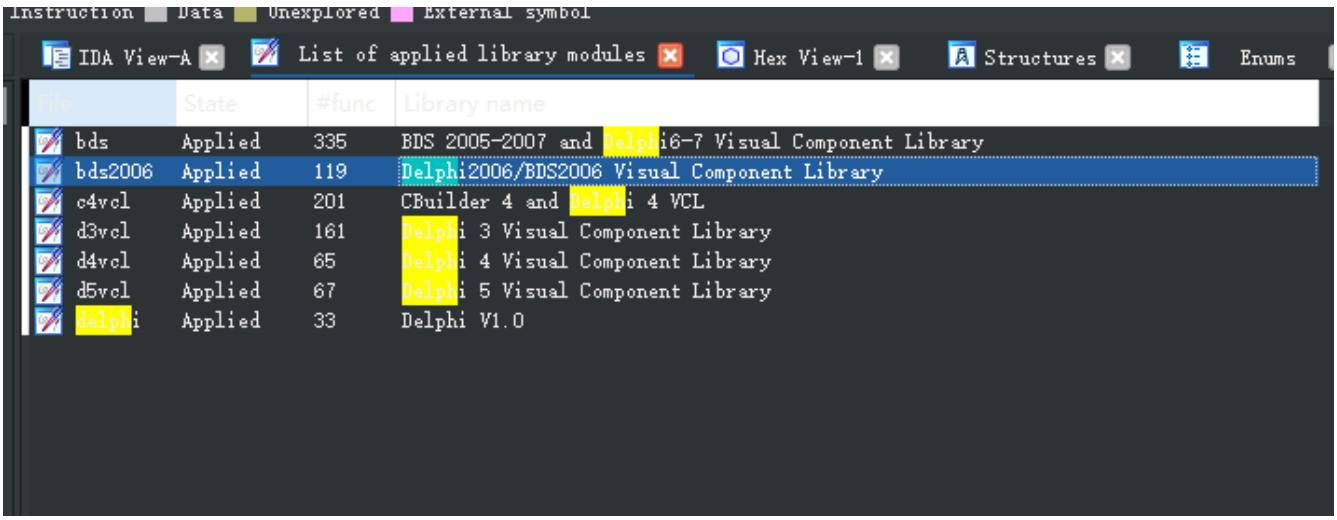
【使用工具】: OD+IDA

【破解日期】：2019-5-28

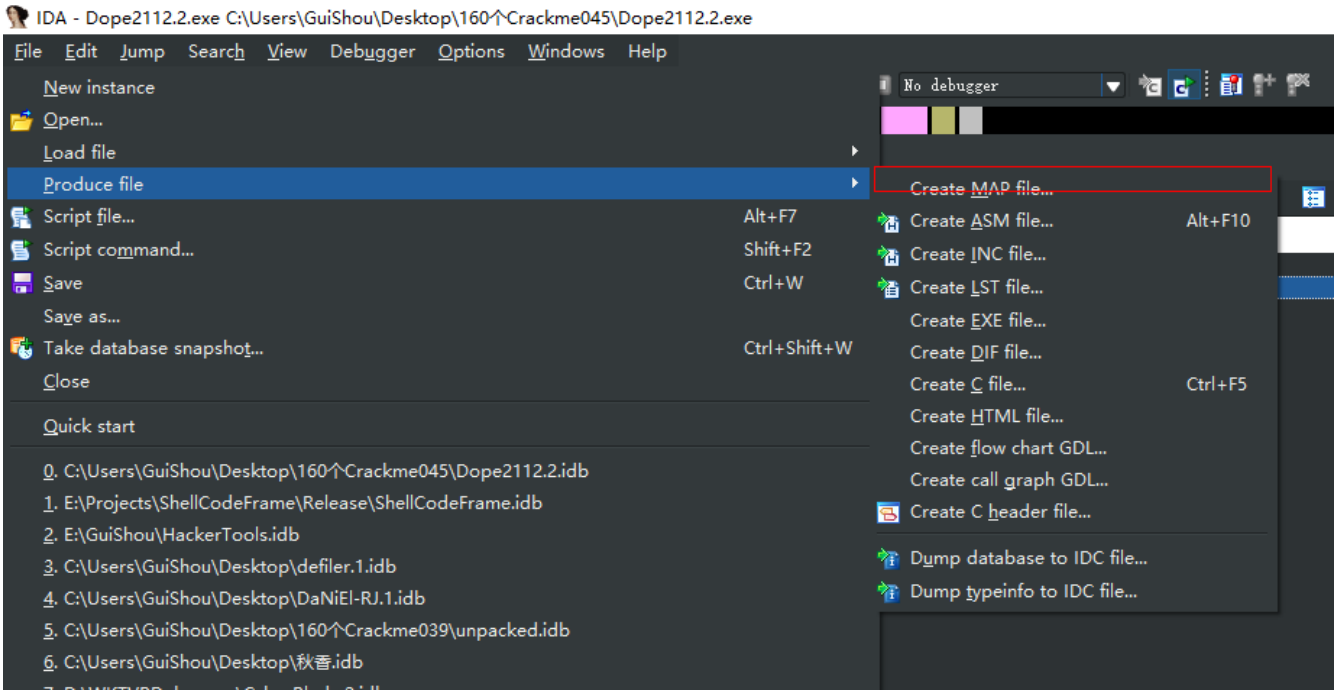
【破解目的】：纯属兴趣

导入符号

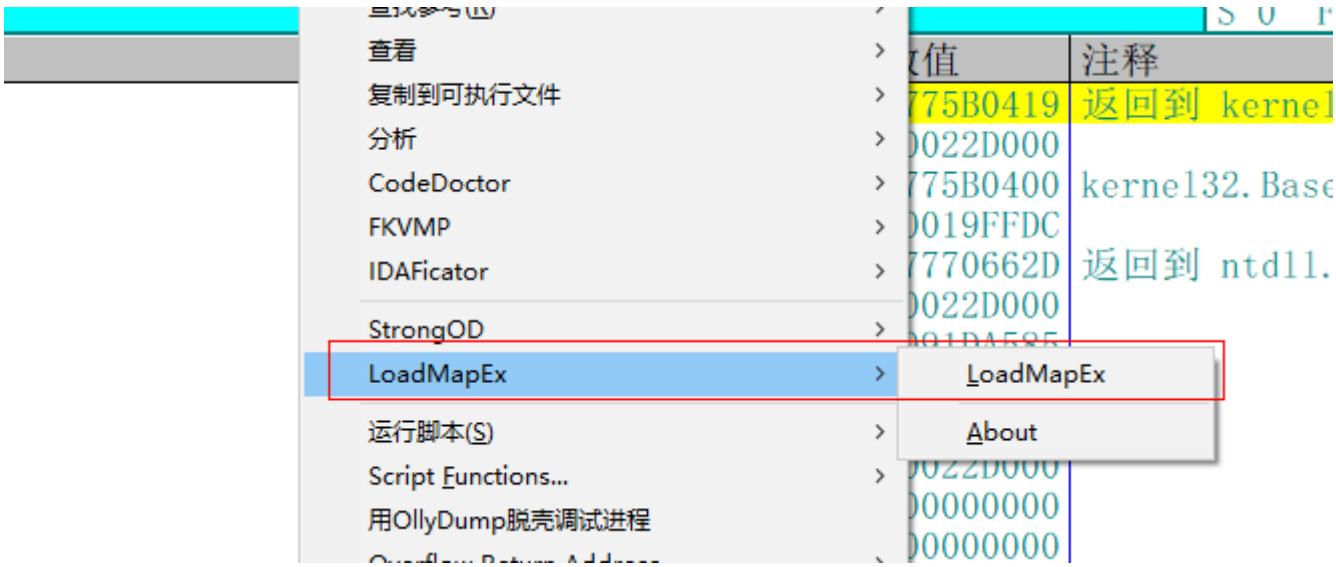
首先将程序载入到IDA，导入所有的Delphi签名



接着生成map文件



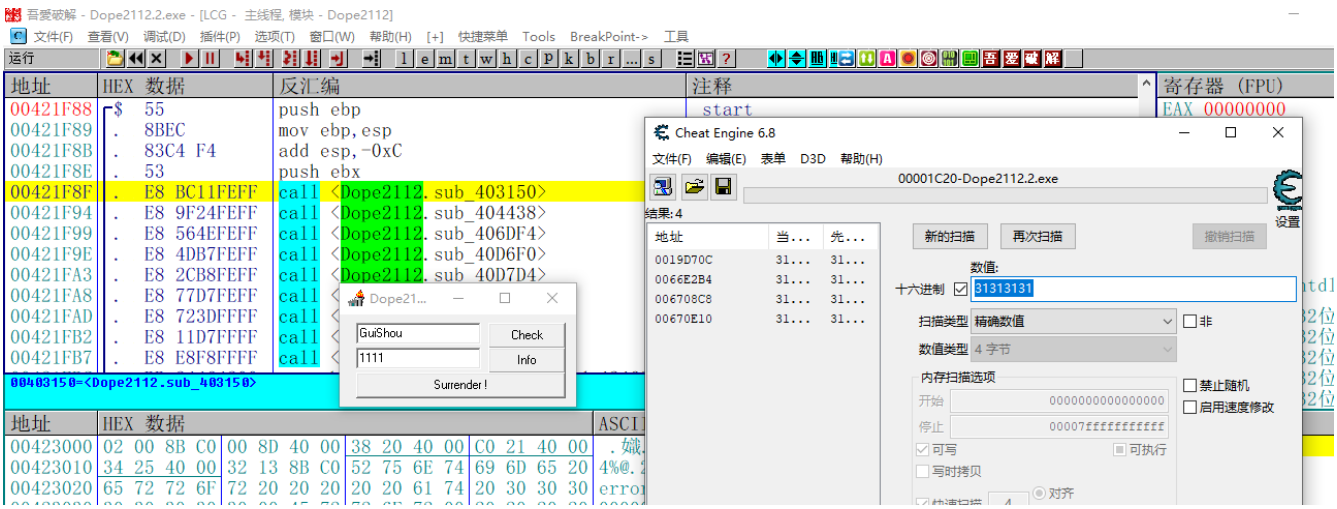
然后在OD中导入



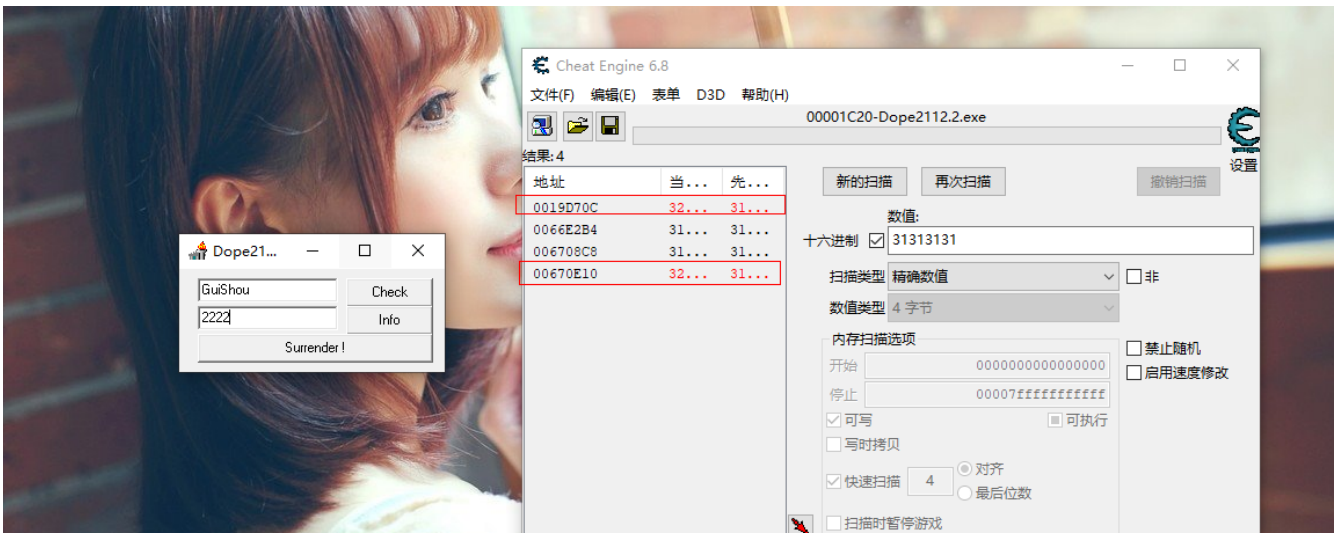
用CE寻找切入点

由于不能用DarkDe，而且无法搜索到字符串，我试了好几个API断点也断不下来，所以只能用CE来搜索地址，首先用OD载入，然后再打开CE，这样可以省去后面再用OD附加的麻烦

由于Delphi中存储的都是ASCII的形式，所以我们直接搜索1111的十六进制ASCII值31313131

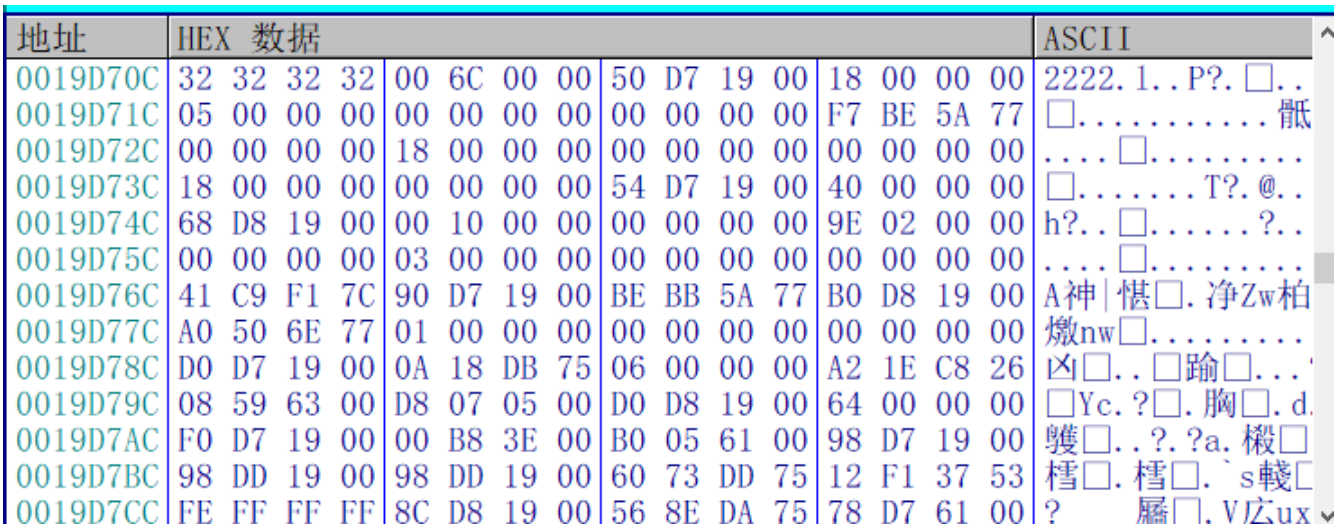


接着变换1111为2222



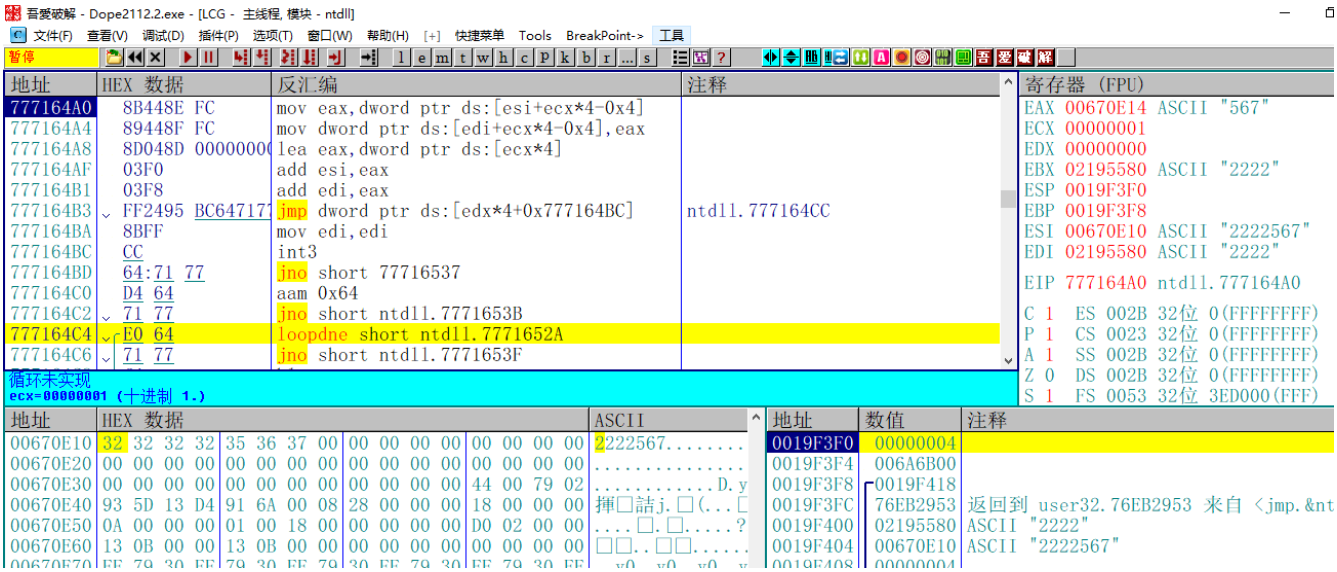
可以很明显的看到我们要的地址就是这两个中的一个了

找到上面两个地址，依次对下面两个地址下一个字节的内存访问断点

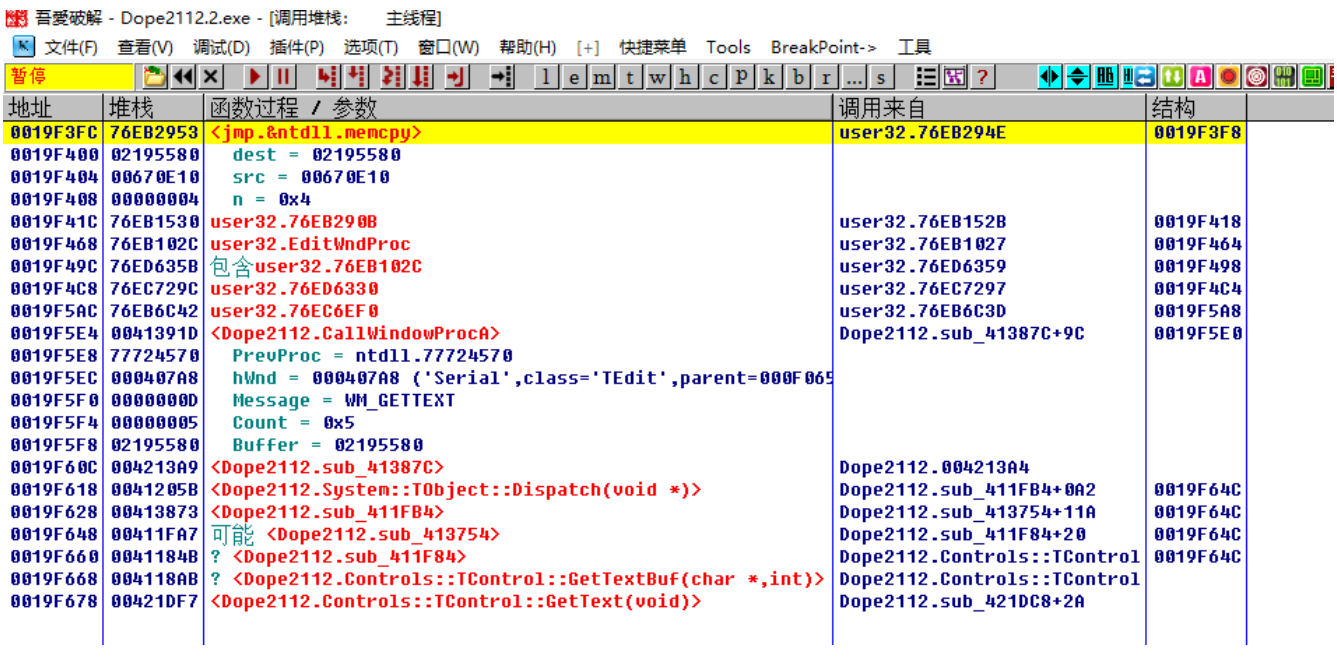


地址	HEX 数据																ASCII
00670E10	32	32	32	32	35	36	37	00	00	00	00	00	00	00	00	00	2222567. . . . .
00670E20	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	. . . . .
00670E30	00	00	00	00	00	00	00	00	00	00	00	00	44	00	79	02	. . . . . D. y
00670E40	93	5D	13	D4	91	6A	00	08	28	00	00	00	18	00	00	00	揮□詰j. □(. . . □
00670E50	0A	00	00	00	01	00	18	00	00	00	00	00	D0	02	00	00	. . . . □. □. . . . . ?
00670E60	13	0B	00	00	13	0B	00	00	00	00	00	00	00	00	00	00	□□. . □□. . . . .
00670E70	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	y0 y0 y0 y
00670E80	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	y0 y0 y0 y0
00670E90	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	0 y0 y0 y0
00670EA0	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	y0 y0 y0 y
00670EB0	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	y0 y0 y0 y0
00670EC0	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	0 y0 y0 y0
00670ED0	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	79	30	FF	y0 y0 y0 y

程序断下



接着点击K，查看调用堆栈

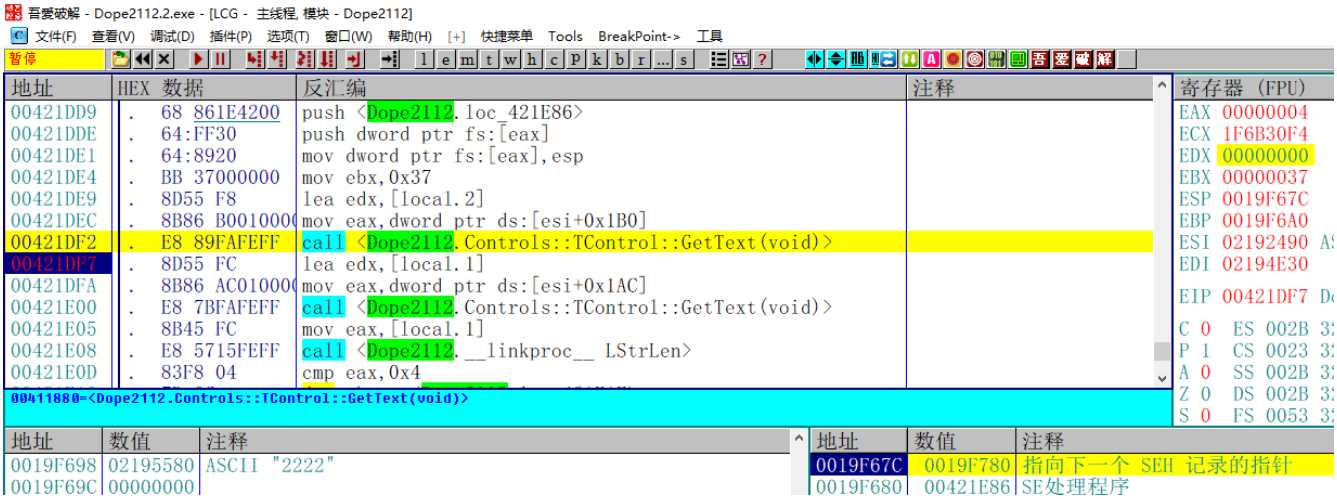


可以看到当前所在的是memcpy这个函数，而最下面的是GetText获取用户输入，直接记下这个地址0x421DF7

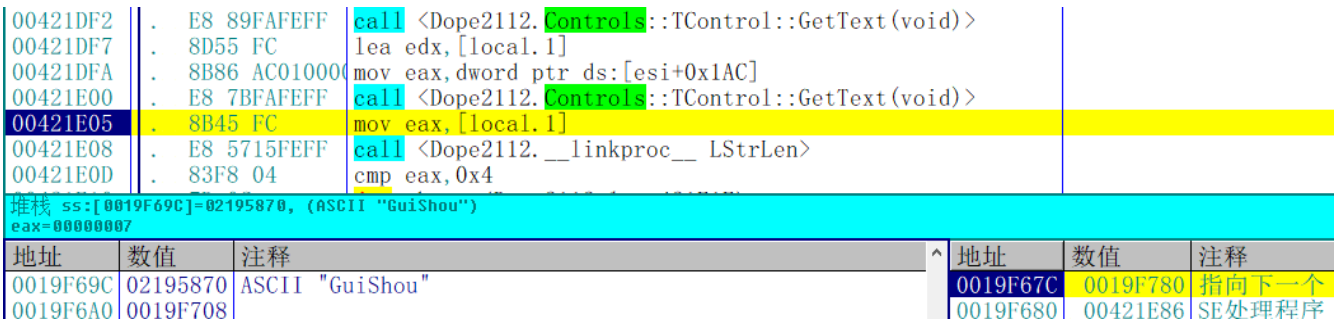
分析算法

找到0x421DF7函数头的位置0x00421DC8 ， 开始分析整个算法，校验步骤如下

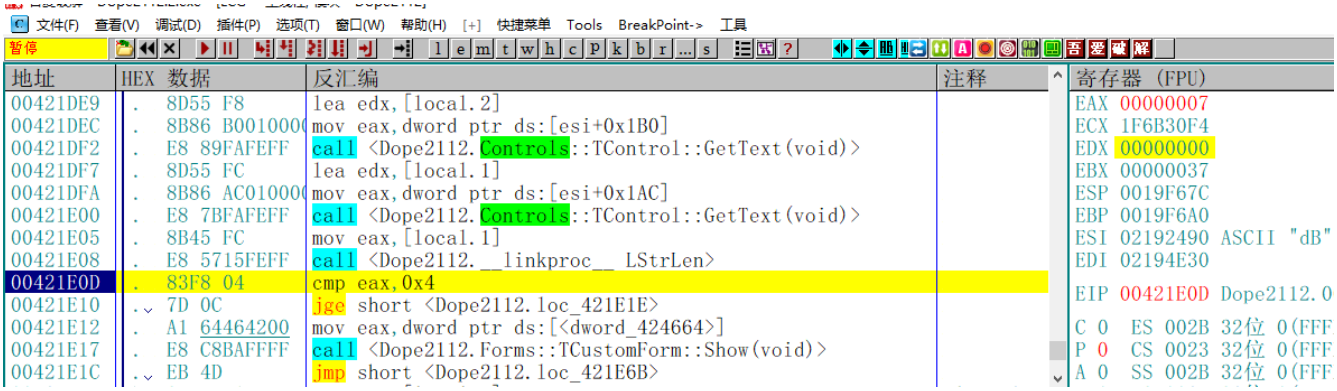
1. 获取序列号



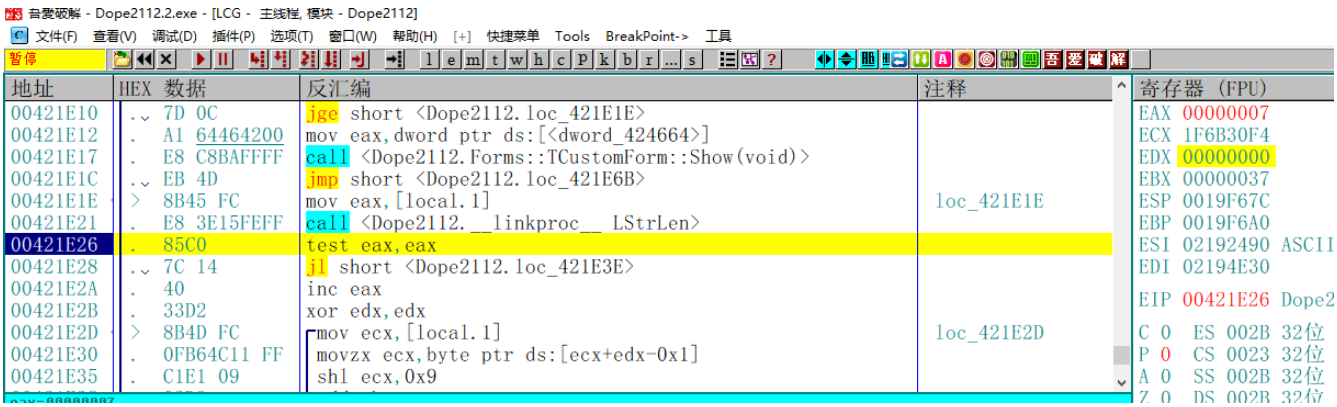
2. 获取用户名



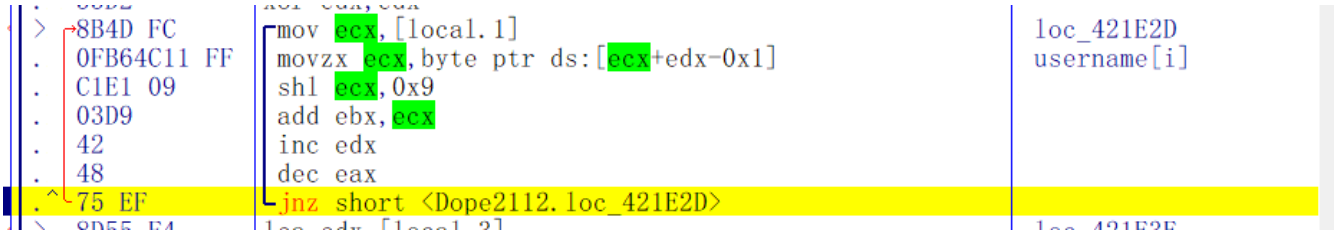
3. 比较用户名长度是否大于等于4



4. 再次获取用户名长度

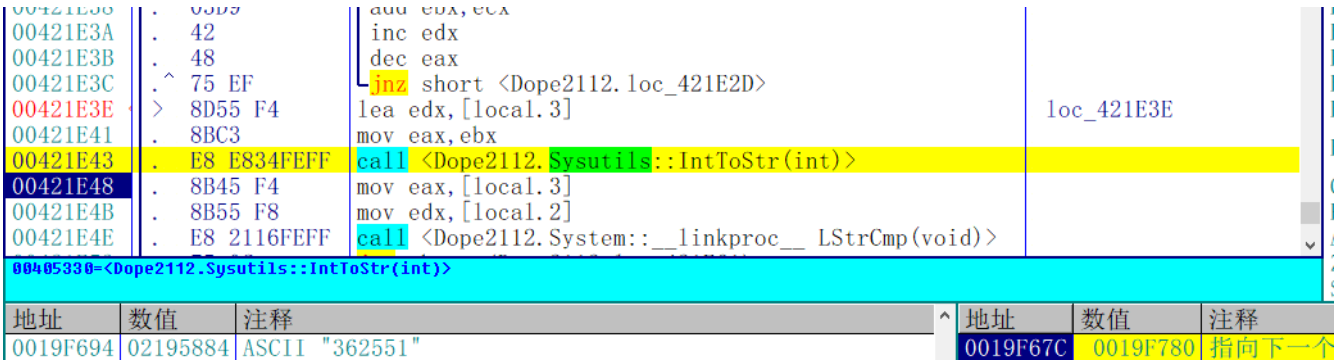


5. 循环累加用户名的ASCII值右移9位的和

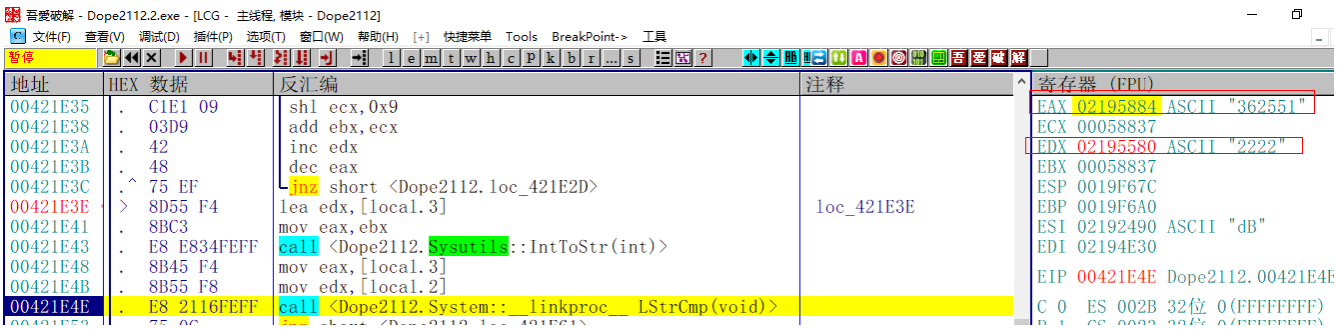



```
if ( usernameLen >= 0 )
{
  v13 = usernameLen + 1;
  i = 0;
  do
  {
    v12 = *(unsigned __int8 *)(v26 + i - 1) << 9;
    v6 += v12;
    ++i;
    --v13;
  }
  while ( v13 );
```

6. 将累加的结果转为字符串



7. 和序列号进行比较



下面贴上IDA的伪代码注释

```
37  v6 = 55;
38  v7 = *(_DWORD *)(a1 + 432);
39  Controls::TControl::GetText(a2);                // 获取序列号
40  v8 = *(_DWORD *)(v5 + 428);
41  Controls::TControl::GetText(v9);                // 获取用户名
42  if ( __linkproc__ LStrLen() >= 4 )              // 检查用户名长度是否大于等于4
43  {
44    usernameLen = __linkproc__ LStrLen();
45    if ( usernameLen >= 0 )
46    {
47      v13 = usernameLen + 1;
48      i = 0;
49      do
50      {
51        v12 = *(unsigned __int8 *)(v26 + i - 1) << 9;// 循环累加用户名的ASCII值右移9位的和
52        v6 += v12;
53        ++i;
54        --v13;
55      }
56      while ( v13 );
57    }
58    Sysutils::IntToStr(v12);                      // 将累加的结果转为字符串
59    System::__linkproc__ LStrCmp(v15, v25);       // 将累加的结果和序列号进行比较
60    Forms::TCustomForm::Show(v16);
```

写出注册机

注册机代码如下:

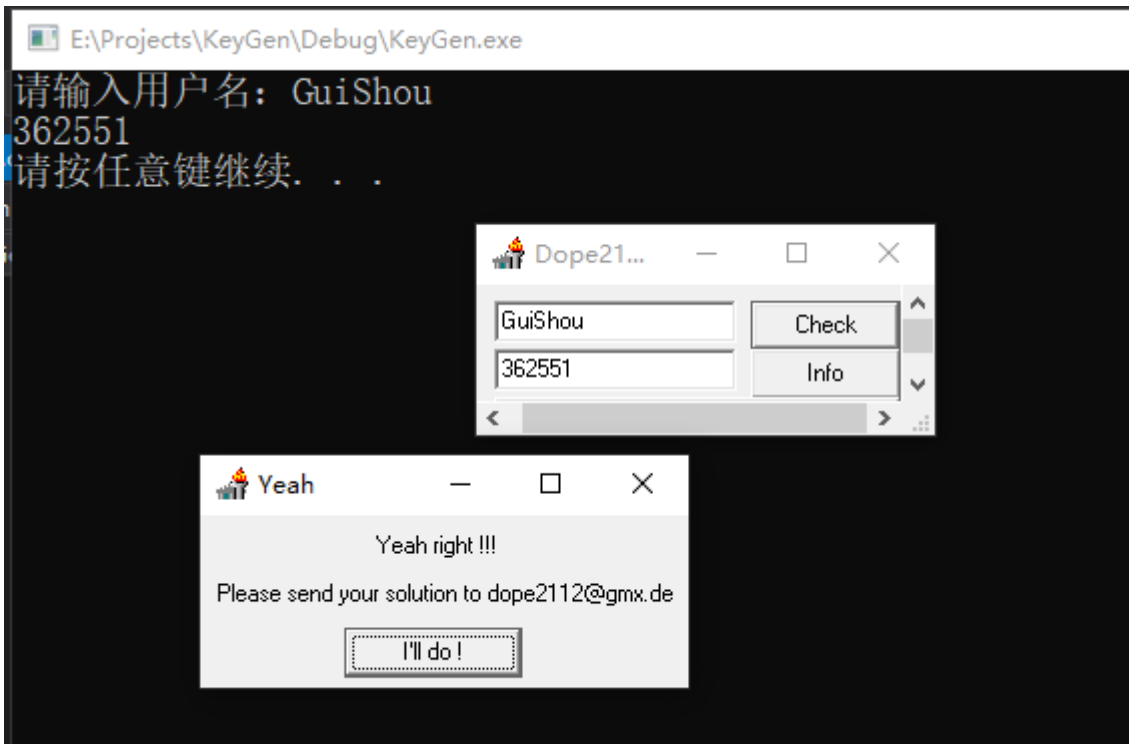
```
#define _CRT_SECURE_NO_WARNINGS
#include <windows.h>
#include <stdio.h>


int main()
{
    int result = 0x37;
    char username[20] = { 0 };
    char serial[20] = { 0 };
    printf("请输入用户名: ");
    scanf_s("%s", username, 20);
    int usernameLen = strlen(username);
    if (usernameLen>=4)
    {
        for (int i = 0; i < usernameLen; i++)
```

```
        {
            result += username[i] << 9;
        }
    }
    printf("%d\n", result);
    system("pause");
    return 0;
}
```

校验结果

输入用户名和计算的序列号



提示成功 破解完成

需要相关文件的可以到我的Github下载：https://github.com/TonyChen56/160-Crackme