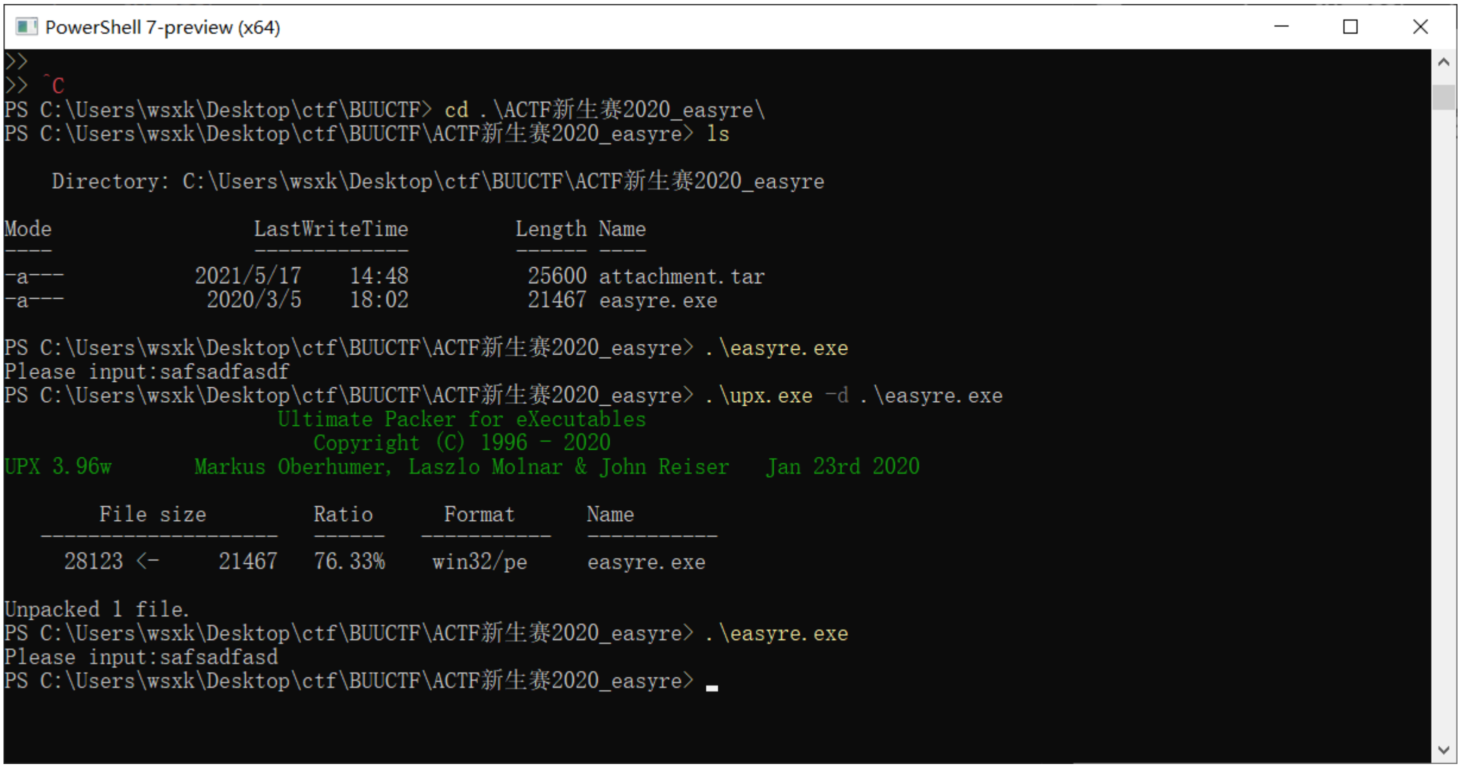
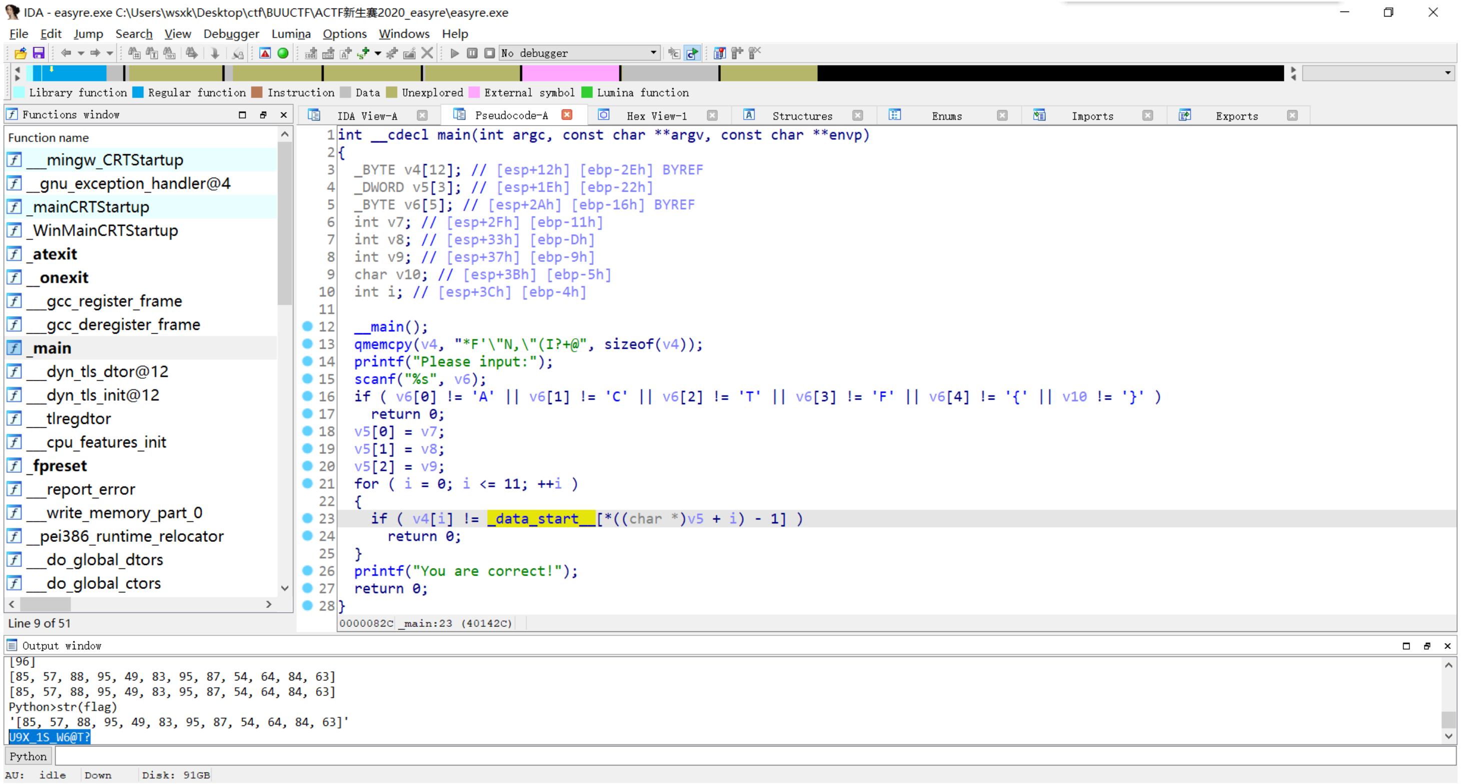
这道题还是比较简单的

去壳



```
>>
>> ^C
PS C:\Users\wsxk\Desktop\ctf\BUUCTF> cd .\ACTF新生赛2020_easyre\
PS C:\Users\wsxk\Desktop\ctf\BUUCTF\ACTF新生赛2020_easyre> ls

    Directory: C:\Users\wsxk\Desktop\ctf\BUUCTF\ACTF新生赛2020_easyre

Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a---           2021/5/17     14:48          25600 attachment.tar
-a---            2020/3/5     18:02          21467 easyre.exe

PS C:\Users\wsxk\Desktop\ctf\BUUCTF\ACTF新生赛2020_easyre> .\easyre.exe
Please input:safsadfasdf
PS C:\Users\wsxk\Desktop\ctf\BUUCTF\ACTF新生赛2020_easyre> .\upx.exe -d .\easyre.exe
                       Ultimate Packer for eXecutables
                          Copyright (C) 1996 - 2020
UPX 3.96w       Markus Oberhumer, Laszlo Molnar & John Reiser   Jan 23rd 2020

        File size         Ratio      Format      Name
   --------------------   ------   -----------   -----------
     28123 <-     21467   76.33%    win32/pe     easyre.exe

Unpacked 1 file.
PS C:\Users\wsxk\Desktop\ctf\BUUCTF\ACTF新生赛2020_easyre> .\easyre.exe
Please input:safsadfasd
PS C:\Users\wsxk\Desktop\ctf\BUUCTF\ACTF新生赛2020_easyre> _
```

ida查看



```c
int __cdecl main(int argc, const char **argv, const char **envp)
{
  _BYTE v4[12]; // [esp+12h] [ebp-2Eh] BYREF
  _DWORD v5[3]; // [esp+1Eh] [ebp-22h]
  _BYTE v6[5]; // [esp+2Ah] [ebp-16h] BYREF
  int v7; // [esp+2Fh] [ebp-11h]
  int v8; // [esp+33h] [ebp-Dh]
  int v9; // [esp+37h] [ebp-9h]
  char v10; // [esp+3Bh] [ebp-5h]
  int i; // [esp+3Ch] [ebp-4h]

  __main();
  qmemcpy(v4, "*F'\"N,\"(I?+@", sizeof(v4));
  printf("Please input:");
  scanf("%s", v6);
  if ( v6[0] != 'A' || v6[1] != 'C' || v6[2] != 'T' || v6[3] != 'F' || v6[4] != '{' || v10 != '}' )
    return 0;
  v5[0] = v7;
  v5[1] = v8;
  v5[2] = v9;
  for ( i = 0; i <= 11; ++i )
  {
    if ( v4[i] != _data_start__[*((char *)v5 + i) - 1] )
      return 0;
  }
  printf("You are correct!");
  return 0;
}
```

```
0000082C _main:23 (40142C)
```

```
[96]
[85, 57, 88, 95, 49, 83, 95, 87, 54, 64, 84, 63]
[85, 57, 88, 95, 49, 83, 95, 87, 54, 64, 84, 63]
Python>str(flag)
'[85, 57, 88, 95, 49, 83, 95, 87, 54, 64, 84, 63]'
U9X_1S_W6@T?
```

可以看出v4是比较字符串，flag格式为ACTF{}，中间的输入值，每个-1作为索引在data——start数组中找到字符，来和v4进行比较

解决办法

爆破，找到v4的每个字符在data——start中的位置，然后每个加1
就能得到输入

知识点

主要是利用了scanf的溢出，因为局部变量存在栈中，scanf时覆盖了v8，v9，v10的值。