

```

40111d: 41 bc 00 00 00 00
401123: bb 01 00 00 00
401128: eb 06
40112a: 41 01 dc
40112d: 83 c3 01
401130: 83 fb 64
401133: 7e f5
401135: 44 89 e0

```

初始化

```

mov 1d $0x0,%r12d
mov 23 $0x1,%ebx
jmp 28 401130 <main+0x1a>
add 2a %ebx,%r12d
add 2d $0x1,%ebx
cmp 30 $0x64,%ebx
jle 33 40112a <main+0x14>
mov 35 %r12d,%eax

```

变化的 reg: pc, %r12d, %ebx, flag

(1d, x, x, x)



(23, 0, x, x)



(28, 0, 1, x)



(30, 0, 1, x)



(33, 0, 1, 0)



(2a, 0, 1, 0)

开始第一个循环



(2d, 1, 1, 0)



(30, 1, 2, 0)



(33, 1, 2, 0)

$$\downarrow$$

$$(2a, 1, 2, 0)$$

第2次

$$\downarrow$$

$$(2d, 3, 2, 0)$$

$$\downarrow$$

$$(30, 3, 3, 0)$$

$$\downarrow$$

$$(33, 3, 3, 0)$$

\downarrow
.....

$$\downarrow$$

$$(2a, x, 99, 0)$$

$$\downarrow_{4851}$$

$$(2d, x+99, 99, 0)$$

$$\downarrow_{4950}$$

$$(30, x+99, 100, 0)$$

$$\downarrow_{4950}$$

$$(33, x+99, 100, 0)$$

$$\downarrow_{4950}$$

$$(2a, x+99, 100, 0)$$

$$\downarrow_{5050}$$

$$(2d, x+99+100, 100, 0)$$

↓

$$(30, \underbrace{x+99+100}_{5050}, 101, 0)$$

↓

$$(33, \underbrace{x+99+100}_{5050}, 101, 1)$$

↓

$$(35, \underbrace{x+99+100}_{5050}, 101, 1)$$

✓ 结束