

Initial count value = 5

```
→ 0x4004ef <main+8>      mov     DWORD PTR [rbp-0x4], 0x5
```

Compare current count value to 0 and if it is greater than 0 do something]

```
→ 0x400512 <main+43>      cmp     DWORD PTR [rbp-0x4], 0x0
   0x400516 <main+47>      jg      0x4004f8 <main+17>
```

Rdi – 1st argument – message and format specifier

Rsi/esi – 2nd argument – count variable or current count value

```
0x4004f8 <main+17>      mov     eax, DWORD PTR [rbp-0x4]
→ 0x4004fb <main+20>      mov     esi, eax
0x4004fd <main+22>      lea     rdi, [rip+0xa0]          # 0x4005a4
0x400504 <main+29>      mov     eax, 0x0
0x400509 <main+34>      call   0x4003f0 <printf@plt>
```

Decrement current count value by 1 and compare if it is 0

```
→ 0x40050e <main+39>      sub     DWORD PTR [rbp-0x4], 0x1
   0x400512 <main+43>      cmp     DWORD PTR [rbp-0x4], 0x0
   0x400516 <main+47>      jg      0x4004f8 <main+17>
```

If count is 0, and comparison is done then zero flag is set

```
gef> x/wx $rbp-4
0x7fffffffef41c: 0x00000000
gef> print $eflags
$5 = [ PF ZF IF ]
gef>
```

```
0x400512 <main+43>      cmp     DWORD PTR [rbp-0x4], 0x0
→ 0x400516 <main+47>      jg      0x4004f8 <main+17>      NOT taken [Reason: !(ZF && S==0)]
0x400518 <main+49>      mov     eax, 0x0
```