## From logic bomb – Phase 3 in assembly

```
0x00000000000400f47 <+0>: sub
                                 $0x18,%rsp
0x0000000000400f4b <+4>: lea
                                 0x8(%rsp),%rcx
0x0000000000400f50 <+9>: lea
                                 0xc(%rsp),%rdx
0x0000000000400f55 <+14>: mov
                                  $0x40277d, %esi
0x0000000000400f5a <+19>: mov
                                  $0x0, %eax
0x00000000000400f5f <+24>: callq
                                  0x400c10 <__isoc99_sscanf@plt>
0x00000000000400f64 <+29>: cmp
                                  $0x1, %eax
0x00000000000400f67 <+32>: jg
                                  0x400f6e <phase_3+39>
                                  0x401534 <explode_bomb>
0x00000000000400f69 < +34>: callq
                                  $0x7,0xc(%rsp)
0x0000000000400f6e <+39>: cmpl
0x0000000000400f73 <+44>: ja
                                  0x400fb1 <phase_3+106>
0x0000000000400f75 <+46>: mov
                                  0xc(%rsp),%eax
                                  *0x4024e0(,%rax,8)
0x0000000000400f79 < +50>: jmpq
                                  $0x70, %eax
0x000000000400f80 <+57>: mov
0x00000000000400f85 <+62>: jmp
                                  0x400fc2 <phase_3+123>
                                  $0x141, %eax
0x00000000000400f87 < +64>: mov
                                  0x400fc2 <phase_3+123>
0x00000000000400f8c <+69>: jmp
                                  $0x3ad, %eax
0x0000000000400f8e <+71>: mov
0x00000000000400f93 < +76>: jmp
                                  0x400fc2 <phase_3+123>
                                   $0xd4, %eax
0x0000000000400f95 < +78 > : mov
0x0000000000400f9a <+83>: jmp
                                   0x400fc2 <phase_3+123>
0x0000000000400f9c <+85>: mov
                                   $0x27b, %eax
0x00000000000400fa1 <+90>: jmp
                                   0x400fc2 <phase_3+123>
                                   $0x3bc, %eax
0x0000000000400fa3 <+92>: mov
0x0000000000400fa8 <+97>: jmp
                                   0x400fc2 <phase_3+123>
                                   $0x29d, %eax
0x0000000000400faa <+99>: mov
0x0000000000400faf <+104>: jmp
                                    0x400fc2 < phase_3 + 123 >
0x0000000000400fb1 <+106>: callq
                                    0x401534 <explode_bomb>
                                    $0x0, %eax
0x000000000400fb6 <+111>: mov
                                    0x400fc2 <phase_3+123>
0x0000000000400fbb < +116>: jmp
0x0000000000400fbd <+118>: mov
                                    $0x311, %eax
                                    0x8(\%rsp),\%eax
0x0000000000400fc2 < +123>: cmp
0x0000000000400fc6 <+127>: je
                                    0x400fcd <phase_3+134>
0x0000000000400fc8 <+129>: callq
                                    0x401534 <explode_bomb>
0x0000000000400fcd <+134>: add
                                    $0x18,%rsp
0x0000000000400fd1 <+138>: retq
```

## From logic bomb – Function 4 in assembly

```
Dump of assembler code for function func4:
   0x0000000000400fd2 <+0>: push
                                   %rbx
                                   %edx,%eax
   0x0000000000400fd3 <+1>: mov
                                   %esi,%eax
   0x00000000000400fd5 <+3>: sub
   0x00000000000400fd7 <+5>: mov
                                   %eax,%ebx
   0x0000000000400fd9 <+7>: shr
                                   $0x1f, %ebx
                                    %ebx,%eax
   0x0000000000400fdc <+10>: add
                                    %eax
   0x00000000000400fde <+12>: sar
   0x0000000000400fe0 <+14>: lea
                                    (%rax, %rsi, 1), %ebx
                                    %edi,%ebx
   0x0000000000400fe3 <+17>: cmp
   0x0000000000400fe5 <+19>: jle
                                    0x400ff3 <func4+33>
                                    -0x1(\%rbx),\%edx
   0x0000000000400fe7 <+21>: lea
                                      0x400fd2 < func4>
   0x0000000000400fea <+24>: callq
                                      %ebx,%eax
   0x0000000000400fef <+29>: add
   0x0000000000400ff1 < +31>: jmp
                                      0x401003 <func4+49>
                                      %ebx,%eax
   0x0000000000400ff3 <+33>: mov
                                      %edi,%ebx
   0x0000000000400ff5 < +35 > : cmp
                                      0x401003 <func4+49>
   0x0000000000400ff7 <+37>: jge
   0x0000000000400ff9 <+39>: lea
                                      0x1(\%rbx),\%esi
  0x0000000000400ffc <+42>: callq
                                      0x400fd2 < func4>
                                      %ebx,%eax
   0x00000000000401001 < +47>: add
                                      %rbx
  0x00000000000401003 < +49>: pop
   0x0000000000401004 <+50>: retq
```