bomb: file format elf64-x86-64

Disassembly of section .init:

bisassembly of section .imic.			
0000000000400a98 <_init>: 400a98: 48 83 ec 08 400a9c: 48 8b 05 55 35 20 00 603ff8 < gmon start >	sub	<pre>\$0x8,%rsp 0x203555(%rip),%rax</pre>	#
400aa3: 48 85 c0 400aa6: 74 05 400aa8: e8 13 01 00 00 400aad: 48 83 c4 08 400ab1: c3	test je callq add retq		_@plt>
Disassembly of section .plt:			
0000000000400ac0 <.plt>:			
400ac0: ff 35 42 35 20 00 < GLOBAL OFFSET TABLE +0x8>	pushq	0x203542(%rip)	# 604008
400ac6: ff 25 44 35 20 00 < GLOBAL OFFSET TABLE +0x10>	jmpq	*0x203544(%rip)	# 604010
400acc: 0f 1f 40 00	nopl	0x0(%rax)	
0000000000400ad0 <getenv@plt>: 400ad0: ff 25 42 35 20 00 <getenv@glibc 2.2.5=""></getenv@glibc></getenv@plt>	jmpq	*0x203542(%rip)	# 604018
400ad6: 68 00 00 00 00 400adb: e9 e0 ff ff ff	pushq jmpq		
0000000000400ae0 <strcasecmp@plt> 400ae0: ff 25 3a 35 20 00 <strcasecmp@glibc 2.2.5=""></strcasecmp@glibc></strcasecmp@plt>	: jmpq	*0x20353a(%rip)	# 604020
400ae6: 68 01 00 00 00 400aeb: e9 d0 ff ff ff	pushq jmpq		
0000000000400af0 < errno locatio	n@plt>:		
400af0: ff 25 32 35 20 00 < errno location@GLIBC 2.2.5>	jmpq	*0x203532(%rip)	# 604028
400af6: 68 02 00 00 00 400afb: e9 c0 ff ff ff	pushq jmpq	<pre>\$0x2 400ac0 <.plt></pre>	
0000000000400b00 <strcpy@plt>: 400b00: ff 25 2a 35 20 00</strcpy@plt>	jmpq	*0x20352a(%rip)	# 604030
<pre><strcpy@glibc_2.2.5> 400b06: 68 03 00 00 00 400b0b: e9 b0 ff ff ff</strcpy@glibc_2.2.5></pre>	pushq jmpq	\$0x3 400ac0 <.plt>	
00000000000400b10 <puts@plt>:</puts@plt>	Jt. A	111000	
400b10: ff 25 22 35 20 00 <puts@glibc 2.2.5=""></puts@glibc>	jmpq	*0x203522(%rip)	# 604038
400b16: 68 04 00 00 00 400b1b: e9 a0 ff ff ff	pushq jmpq	<pre>\$0x4 400ac0 <.plt></pre>	

0000000000400b20 <write@plt>: 400b20: ff 25 1a 35 20 00 <write@glibc_2.2.5> 400b26: 68 05 00 00 00 400b2b: e9 90 ff ff ff</write@glibc_2.2.5></write@plt>	jmpq pushq jmpq		#	604040
0000000000400b30 <printf@plt>: 400b30: ff 25 12 35 20 00 <printf@glibc_2.2.5> 400b36: 68 06 00 00 00 400b3b: e9 80 ff ff ff</printf@glibc_2.2.5></printf@plt>	jmpq pushq jmpq	*0x203512(%rip) \$0x6 400ac0 <.plt>	#	604048
0000000000400b40 <alarm@plt>: 400b40: ff 25 0a 35 20 00 <alarm@glibc_2.2.5> 400b46: 68 07 00 00 00 400b4b: e9 70 ff ff ff</alarm@glibc_2.2.5></alarm@plt>	jmpq pushq jmpq	*0x20350a(%rip) \$0x7 400ac0 <.plt>	#	604050
0000000000400b50 <close@plt>: 400b50: ff 25 02 35 20 00 <close@glibc_2.2.5> 400b56: 68 08 00 00 00 400b5b: e9 60 ff ff ff</close@glibc_2.2.5></close@plt>	jmpq pushq jmpq	*0x203502(%rip) \$0x8 400ac0 <.plt>	#	604058
0000000000400b60 <read@plt>: 400b60: ff 25 fa 34 20 00 <read@glibc_2.2.5> 400b66: 68 09 00 00 00 400b6b: e9 50 ff ff ff</read@glibc_2.2.5></read@plt>	jmpq pushq jmpq	*0x2034fa(%rip) \$0x9 400ac0 <.plt>	#	604060
0000000000400b70 <libc_start_main 00="" 20="" 25="" 34="" 400b70:="" <libc_start_main@glibc_2.2.5="" f2="" ff=""> 400b76: 68 0a 00 00 00 400b7b: e9 40 ff ff ff</libc_start_main>	in@plt> jmpq pushq jmpq	*0x2034f2(%rip)	#	604068
0000000000400b80 <fgets@plt>: 400b80: ff 25 ea 34 20 00 <fgets@glibc_2.2.5> 400b86: 68 0b 00 00 00 400b8b: e9 30 ff ff ff</fgets@glibc_2.2.5></fgets@plt>	jmpq pushq jmpq	*0x2034ea(%rip) \$0xb 400ac0 <.plt>	#	604070
0000000000400b90 <signal@plt>: 400b90: ff 25 e2 34 20 00 <signal@glibc_2.2.5> 400b96: 68 0c 00 00 00 400b9b: e9 20 ff ff ff</signal@glibc_2.2.5></signal@plt>	jmpq pushq jmpq	*0x2034e2(%rip) \$0xc 400ac0 <.plt>	#	604078
0000000000400ba0 <gethostbyname@pl 400ba0: ff 25 da 34 20 00 <gethostbyname@glibc_2.2.5> 400ba6: 68 0d 00 00 00 400bab: e9 10 ff ff ff</gethostbyname@glibc_2.2.5></gethostbyname@pl 		*0x2034da(%rip) \$0xd 400ac0 <.plt>	#	604080

0000000000400bb0 <fprintf@plt>: 400bb0: ff 25 d2 34 20 00 <fprintf@glibc_2.2.5> 400bb6: 68 0e 00 00 00 400bbb: e9 00 ff ff ff</fprintf@glibc_2.2.5></fprintf@plt>	jmpq pushq jmpq	*0x2034d2(%rip) \$0xe 400ac0 <.plt>	#	604088
0000000000400bc0 <gmon_start@r 400bc0: ff 25 ca 34 20 00 <gmon_start> 400bc6: 68 0f 00 00 00 400bcb: e9 f0 fe ff ff</gmon_start></gmon_start@r 	olt>: jmpq pushq jmpq	*0x2034ca(%rip) \$0xf 400ac0 <.plt>	#	604090
0000000000400bd0 <memcpy@plt>: 400bd0: ff 25 c2 34 20 00 <memcpy@glibc_2.14> 400bd6: 68 10 00 00 00 400bdb: e9 e0 fe ff ff</memcpy@glibc_2.14></memcpy@plt>	jmpq pushq jmpq	*0x2034c2(%rip) \$0x10 400ac0 <.plt>	#	604098
0000000000400be0 <fflush@plt>: 400be0: ff 25 ba 34 20 00 <fflush@glibc_2.2.5> 400be6: 68 11 00 00 00 400beb: e9 d0 fe ff ff</fflush@glibc_2.2.5></fflush@plt>	jmpq pushq jmpq	*0x2034ba(%rip) \$0x11 400ac0 <.plt>	#	6040a0
0000000000400bf0 <isoc99_sscanf@400bf0: 00="" 20="" 25="" 34="" <isoc99_sscanf@glibc_2.7="" b2="" ff=""> 400bf6: 68 12 00 00 00 400bfb: e9 c0 fe ff ff</isoc99_sscanf@400bf0:>	<pre>Pplt>: jmpq pushq jmpq</pre>	*0x2034b2(%rip) \$0x12 400ac0 <.plt>	#	6040a8
0000000000400c00 <bcopy@plt>: 400c00: ff 25 aa 34 20 00 <bcopy@glibc_2.2.5> 400c06: 68 13 00 00 00 400c0b: e9 b0 fe ff ff</bcopy@glibc_2.2.5></bcopy@plt>	jmpq pushq jmpq	*0x2034aa(%rip) \$0x13 400ac0 <.plt>	#	6040b0
0000000000400c10 <fopen@plt>: 400c10: ff 25 a2 34 20 00 <fopen@glibc_2.2.5> 400c16: 68 14 00 00 00 400c1b: e9 a0 fe ff ff</fopen@glibc_2.2.5></fopen@plt>	jmpq pushq jmpq	*0x2034a2(%rip) \$0x14 400ac0 <.plt>	#	6040b8
0000000000400c20 <gethostname@plt> 400c20: ff 25 9a 34 20 00 <gethostname@glibc_2.2.5> 400c26: 68 15 00 00 00 400c2b: e9 90 fe ff ff</gethostname@glibc_2.2.5></gethostname@plt>	<pre>pushq jmpq</pre>	*0x20349a(%rip) \$0x15 400ac0 <.plt>	#	6040c0
0000000000400c30 <sprintf@plt>: 400c30: ff 25 92 34 20 00 <sprintf@glibc_2.2.5> 400c36: 68 16 00 00 00 400c3b: e9 80 fe ff ff</sprintf@glibc_2.2.5></sprintf@plt>	jmpq pushq jmpq	*0x203492(%rip) \$0x16 400ac0 <.plt>	#	6040c8

```
0000000000400c40 <exit@plt>:
 400c40: ff 25 8a 34 20 00 jmpq *0x20348a(%rip) # 6040d0
<exit@GLIBC 2.2.5>
 400c46: 68 17 00 00 00
                              pushq $0x17
 400c4b: e9 70 fe ff ff
                               jmpq
                                     400ac0 <.plt>
0000000000400c50 <connect@plt>:
 400c50: ff 25 82 34 20 00
                                    *0x203482(%rip)
                                                          # 6040d8
                           jmpq
<connect@GLIBC_2.2.5>
 400c56: 68 18 00 00 00
                             pushq $0x18
 400c5b: e9 60 fe ff ff
                               jmpq 400ac0 <.plt>
0000000000400c60 <sleep@plt>:
 400c60: ff 25 7a 34 20 00
                                                          # 6040e0
                               jmpq *0x20347a(%rip)
<sleep@GLIBC 2.2.5>
 400c66: 68 19 00 00 00
                               pushq $0x19
                                     400ac0 <.plt>
 400c6b:
          e9 50 fe ff ff
                              jmpq
0000000000400c70 < ctype b loc@plt>:
 400c70: ff 25 72 34 20 00
                            jmpq *0x203472(%rip)
                                                          # 6040e8
< ctype b loc@GLIBC 2.3>
 400c76: 68 1a 00 00 00
                              pushq $0x1a
 400c7b: e9 40 fe ff ff
                               jmpq 400ac0 <.plt>
0000000000400c80 <socket@plt>:
 400c80: ff 25 6a 34 20 00 jmpq *0x20346a(%rip)
                                                          # 6040f0
<socket@GLIBC 2.2.5>
 400c86: 68 1b 00 00 00
                              pushq $0x1b
 400c8b: e9 30 fe ff ff
                                     400ac0 <.plt>
                               jmpq
Disassembly of section .text:
0000000000400c90 < start>:
 400c90: 31 ed
                              xor
                                    %ebp,%ebp
 400c92: 49 89 d1
                              mov
                                    %rdx,%r9
                              pop
 400c95: 5e
                                    %rsi
 400c96: 48 89 e2
                              mov
                                    %rsp,%rdx
 400c99: 48 83 e4 f0
                              and $0xfffffffffffffff, %rsp
                              push %rax
 400c9d: 50
                              push %rsp
 400c9e: 54
 400c9f: 49 c7 c0 50 29 40 00 mov $0x402950, %r8
 400ca6: 48 c7 c1 e0 28 40 00 mov
                                    $0x4028e0,%rcx
 400cad: 48 c7 c7 7d 0d 40 00 mov $0x400d7d, %rdi
 400cb4: e8 b7 fe ff ff
                               callq 400b70 < libc start main@plt>
 400cb9: f4
                               hlt.
 400cba: 66 0f 1f 44 00 00
                               nopw
                                    0x0(%rax,%rax,1)
0000000000400cc0 <deregister tm clones>:
 400cc0: b8 07 46 60 00
                               mov
                                    $0x604607,%eax
 400cc5: 55
                              push %rbp
 400cc6: 48 2d 00 46 60 00
                              sub $0x604600,%rax
 400ccc: 48 83 f8 0e
                               cmp
                                     $0xe,%rax
 400cd0: 48 89 e5
                               mov
                                     %rsp,%rbp
```

```
400cd3: 77 02
                                ja 400cd7
<deregister tm clones+0x17>
 400cd5: 5d
                                pop
                                      %rbp
 400cd6: c3
                                reta
 400cd7: b8 00 00 00 00
                                mov
                                       $0x0, %eax
 400cdc: 48 85 c0
                                test %rax, %rax
 400cdf: 74 f4
                                      400cd5
                                jе
<deregister tm clones+0x15>
 400ce1: 5d
                                pop
                                      %rbp
 400ce2: bf 00 46 60 00
                                mov
                                       $0x604600, %edi
 400ce7: ff e0
                                jmpq
                                      *%rax
 400ce9: 0f 1f 80 00 00 00 00 nopl 0x0(%rax)
0000000000400cf0 <register tm clones>:
 400cf0: b8 00 46 60 00
                                       $0x604600, %eax
                                mov
                                push %rbp
 400cf5: 55
 400cf6: 48 2d 00 46 60 00
                                sub
                                     $0x604600,%rax
 400cfc: 48 c1 f8 03
                                      $0x3,%rax
                                sar
 400d00: 48 89 e5
                                mov
                                      %rsp,%rbp
 400d03: 48 89 c2
                                     %rax,%rdx
                               mov
 400d06: 48 c1 ea 3f
                               shr
                                     $0x3f,%rdx
 400d0a: 48 01 d0
                               add
                                      %rdx,%rax
 400d0d: 48 d1 f8
                               sar
                                     %rax
 400d10: 75 02
                                      400d14 <register_tm_clones+0x24>
                               ine
 400d12: 5d
                                       %rbp
                                pop
 400d13: c3
                                retq
 400d14: ba 00 00 00 00
                                       $0x0, %edx
                               mov
 400d19: 48 85 d2
                               test
                                      %rdx,%rdx
 400d1c: 74 f4
                                      400d12 <register tm clones+0x22>
                                jе
 400d1e: 5d
                                pop
                                       %rbp
 400d1f: 48 89 c6
                                      %rax,%rsi
                                mov
 400d22: bf 00 46 60 00
                                mov $0x604600,%edi
 400d27: ff e2
                                      *%rdx
                                jmpq
 400d29: Of 1f 80 00 00 00 00
                                       0x0(%rax)
                                nopl
00000000000400d30 < __do_global_dtors_aux>:
  400d30: 80 3d e1 38 20 00 00 cmpb $0x0,0x2038e1(%rip)
604618 <completed.6355>
 400d37: 75 11
                                ine
                                       400d4a
< do global dtors aux+0x1a>
  400d39:
          55
                                push
                                       %rbp
 400d3a: 48 89 e5
                                mov
                                       %rsp,%rbp
 400d3d: e8 7e ff ff ff
                                callq 400cc0 <deregister tm clones>
 400d42: 5d
                                pop
                                       %rbp
 400d43: c6 05 ce 38 20 00 01
                                       $0x1,0x2038ce(%rip)
                                movb
604618 <completed.6355>
 400d4a: f3 c3
                                repz retq
 400d4c: Of 1f 40 00
                                nopl 0x0(%rax)
0000000000400d50 <frame dummy>:
  400d50: 48 83 3d c8 30 20 00 cmpg $0x0,0x2030c8(%rip)
603e20 < JCR_END__>
 400d57: 00
  400d58:
          74 1e
                                jе
                                      400d78 < frame dummy + 0x28 >
```

```
400d5a: b8 00 00 00 00
                              mov
                                      $0x0, %eax
 400d5f: 48 85 c0
                                test
                                      %rax,%rax
 400d62: 74 14
                               jе
                                       400d78 < frame dummy + 0x28 >
 400d64: 55
                               push
 400d65: bf 20 3e 60 00
                               mov
                                      $0x603e20,%edi
 400d6a: 48 89 e5
                                     %rsp,%rbp
                                mov
 400d6d: ff d0
                               callq *%rax
 400d6f: 5d
                                       %rbp
                               pop
 400d70: e9 7b ff ff ff
                              jmpq
                                      400cf0 <register tm clones>
 400d75: Of 1f 00
                               nopl
                                       (%rax)
 400d78: e9 73 ff ff ff
                               jmpq
                                       400cf0 <register tm clones>
0000000000400d7d <main>:
 400d7d: 55
                                push
                                      %rbp
 400d7e: 53
                                push
                                      %rbx
 400d7f: 48 83 ec 08
                                sub
                                      $0x8,%rsp
 400d83: 89 fb
                                mov
                                      %edi,%ebx
 400d85: 83 ff 01
                                cmp
                                      $0x1, %edi
 400d88: 75 10
                                jne
                                    400d9a <main+0x1d>
 400d8a: 48 8b 05 77 38 20 00 mov
                                    0x203877(%rip),%rax
604608 <stdin@@GLIBC 2.2.5>
  400d91: 48 89 05 90 38 20 00
                                mov
                                     %rax,0x203890(%rip)
604628 <infile>
 400d98: eb 5a
                                jmp
                                      400df4 <main+0x77>
 400d9a: 48 89 f5
                                mov
                                      %rsi,%rbp
 400d9d: 83 ff 02
                                cmp
                                      $0x2,%edi
 400da0: 75 36
                                      400dd8 <main+0x5b>
                               jne
 400da2: 48 8b 7e 08
                               mov
                                    0x8(%rsi),%rdi
 400da6: be 70 29 40 00
                                     $0x402970,%esi
                               mov
 400dab: e8 60 fe ff ff
                               callq 400c10 <fopen@plt>
 400db0: 48 89 05 71 38 20 00 mov
                                      %rax,0x203871(%rip)
604628 <infile>
 400db7: 48 85 c0
                               test %rax, %rax
 400dba: 75 38
                               jne
                                      400df4 < main + 0x77 >
 400dbc: 48 8b 55 08
                              mov
                                      0x8(%rbp),%rdx
 400dc0: 48 8b 75 00
                              mov
                                    0x0(%rbp),%rsi
 400dc4: bf 72 29 40 00
                                     $0x402972,%edi
                              mov
 400dc9: e8 62 fd ff ff
                              callq 400b30 <printf@plt>
 400dce: bf 08 00 00 00
                              mov
                                      $0x8, %edi
 400dd3: e8 68 fe ff ff
                              callq 400c40 <exit@plt>
                               mov
 400dd8: 48 8b 36
                                       (%rsi),%rsi
 400ddb: bf 8f 29 40 00
                              mov
                                      $0x40298f, %edi
 400de0: b8 00 00 00 00
                                      $0x0,%eax
                              mov
 400de5: e8 46 fd ff ff
                               callq 400b30 <printf@plt>
 400dea: bf 08 00 00 00
                                      $0x8,%edi
                               mov
 400def: e8 4c fe ff ff
                               callq 400c40 <exit@plt>
 400df4: e8 be 05 00 00
                              callq 4013b7 <initialize bomb>
 400df9: 89 df
                               mov
                                      %ebx, %edi
 400dfb: b8 00 00 00 00
                               mov
                                      $0x0, %eax
 400e00: e8 6b 06 00 00
                              callq 401470 <welcome message>
 400e05: e8 6e 0e 00 00
                              callq 401c78 < read line>
 400e0a: 48 89 c7
                               mov %rax,%rdi
  400e0d: e8 ae 00 00 00
                                callq 400ec0 <phase 1>
                                callq 401667 <phase defused>
  400e12: e8 50 08 00 00
```

```
400e17: bf c8 29 40 00
                               mov $0x4029c8, %edi
 400e1c: e8 ef fc ff ff
                               callq 400b10 <puts@plt>
 400e21: e8 52 0e 00 00
                              callq 401c78 < read line>
 400e26: 48 89 c7
                                      %rax,%rdi
 400e29: e8 ad 00 00 00
                              callq 400edb <phase 2>
 400e2e: e8 34 08 00 00
                              callq 401667 <phase defused>
 400e33: bf 08 2a 40 00
                              mov $0x402a08,%edi
 400e38: e8 d3 fc ff ff
                              callq 400b10 <puts@plt>
 400e3d: e8 36 0e 00 00
                              callq 401c78 < read line>
 400e42: 48 89 c7
                              mov
                                      %rax,%rdi
 400e45: e8 48 01 00 00
                              callq 400f92 <phase 3>
 400e4a: e8 18 08 00 00
                              callq 401667 <phase defused>
 400e4f: bf 30 2a 40 00
                              mov $0x402a30,%edi
                               callq 400b10 <puts@plt>
 400e54: e8 b7 fc ff ff
 400e59: e8 1a 0e 00 00
                              callq 401c78 < read line>
 400e5e: 48 89 c7
                               mov %rax,%rdi
                              callq 400ff7 <phase_4>
callq 401667 <phase_defused>
 400e61: e8 91 01 00 00
 400e66: e8 fc 07 00 00
 400e6b: bf 58 2a 40 00
                              mov
                                      $0x402a58, %edi
 400e70: e8 9b fc ff ff
                              callq 400b10 <puts@plt>
 400e75: e8 fe 0d 00 00
                               callq 401c78 <read_line>
 400e7a: 48 89 c7
                               mov
                                      %rax,%rdi
 400e7d: e8 20 02 00 00
                              callq 4010a2 <phase 5>
                              callq 401667 <phase_defused>
 400e82: e8 e0 07 00 00
 400e87: bf 90 2a 40 00
                              mov
                                      $0x402a90,%edi
 400e8c: e8 7f fc ff ff
                              callq 400b10 <puts@plt>
 400e91: e8 e2 0d 00 00
                              callq 401c78 <read line>
 400e96: 48 89 c7
                                      %rax,%rdi
                              mov
 400e99: e8 5b 02 00 00
                               callq 4010f9 <phase 6>
 400e9e: e8 c4 07 00 00
                              callq 401667 <phase_defused>
 400ea3: bf a9 29 40 00
                              mov $0x4029a9,%edi
 400ea8: e8 63 fc ff ff
                              callq 400b10 <puts@plt>
 400ead: b8 00 00 00 00
                               mov
                                      $0x0,%eax
 400eb2: 48 83 c4 08
                                add
                                      $0x8,%rsp
 400eb6: 5b
                                      %rbx
                                pop
 400eb7: 5d
                                pop
                                     %rbp
  400eb8: c3
                                retq
 400eb9: Of 1f 80 00 00 00 00
                                nopl
                                      0x0(%rax)
0000000000400ec0 <phase 1>:
 400ec0: 53
                                push
                                       %rbx
 400ec1: 48 89 fb
                                mov
                                       %rdi,%rbx
 400ec4: 80 7f 01 00
                                      $0x0,0x1(%rdi)
                                cmpb
 400ec8: 74 05
                                jе
                                     400ecf <phase 1+0xf>
 400eca: e8 d1 07 00 00
                                callq 4016a0 <explode bomb>
 400ecf: 80 3b 69
                                cmpb
                                      $0x69, (%rbx)
 400ed2: 74 05
                                      400ed9 <phase 1+0x19>
                               jе
 400ed4: e8 c7 07 00 00
                               callq 4016a0 <explode bomb>
 400ed9: 5b
                                      %rbx
                                pop
 400eda: c3
                                retq
0000000000400edb <phase 2>:
  400edb: 41 54
                                push
                                       %r12
  400edd:
                                push
                                       %rbp
```

```
400ede: 53
                                  push
                                         %rbx
  400edf: 48 83 ec 20
                                  sub
                                         $0x20,%rsp
  400ee3: 48 89 e6
                                         %rsp,%rsi
                                  mov
  400ee6: e8 4b 0d 00 00
                                  callq 401c36 < read six numbers>
                                         $0x4,(%rsp)
  400eeb: 83 3c 24 04
                                  cmpl
  400eef: 7f 3f
                                         400f30 < phase 2 + 0x55 >
                                  jg
  400ef1: e8 aa 07 00 00
                                  callq 4016a0 <explode bomb>
  400ef6: eb 38
                                  jmp
                                         400f30 <phase 2+0x55>
  400ef8: 49 89 dc
                                         %rbx,%r12
                                  mov
  400efb: 8b 43 fc
                                  mov
                                         -0x4(%rbx), %eax
 400efe: 29 e8
                                  sub
                                         %ebp, %eax
                                         %eax, (%rbx)
  400f00: 39 03
                                  cmp
  400f02: 74 05
                                         400f09 < phase 2 + 0x2e >
                                  jе
  400f04: e8 97 07 00 00
                                  callq 4016a0 <explode bomb>
  400f09: 41 8b 04 24
                                        (%r12),%eax
                                  mov
  400f0d: 89 05 09 37 20 00
                                       %eax,0x203709(%rip)
                                  mov
60461c <last>
  400f13: 83 c5 01
                                  add
                                         $0x1, %ebp
  400f16: 48 83 c3 04
                                  add
                                         $0x4, %rbx
  400fla: 83 fd 06
                                         $0x6, %ebp
                                  cmp
  400f1d: 75 d9
                                         400ef8 <phase 2+0x1d>
                                  jne
  400f1f: 8b 05 f7 36 20 00
                                  mov
                                         0x2036f7(%rip),%eax
60461c <last>
  400f25: 85 c0
                                  test
                                         %eax, %eax
  400f27: 75 13
                                  jne
                                         400f3c < phase 2+0x61>
  400f29: e8 72 07 00 00
                                  callq 4016a0 <explode bomb>
                                         400f3c <phase 2+0x61>
 400f2e: eb 0c
                                  qmŗ
 400f30: 48 8d 5c 24 04
                                  lea
                                         0x4(%rsp),%rbx
  400f35: bd 01 00 00 00
                                  mov
                                         $0x1, %ebp
 400f3a: eb bc
                                  jmp
                                         400ef8 <phase_2+0x1d>
 400f3c: 48 83 c4 20
                                         $0x20,%rsp
                                  add
 400f40: 5b
                                        %rbx
                                  pop
 400f41: 5d
                                         %rbp
                                  pop
  400f42: 41 5c
                                         %r12
                                  pop
  400f44: c3
                                  retq
0000000000400f45 <func_switch>:
  400f45: 83 ff 07
                                  cmp
                                         $0x7, %edi
          77 2d
  400f48:
                                         400f77 <func switch+0x32>
                                  jа
  400f4a: 89 ff
                                  mov
                                         %edi,%edi
  400f4c: ff 24 fd c0 2a 40 00
                                  jmpq
                                         *0x402ac0(,%rdi,8)
  400f53: b8 91 02 00 00
                                  mov
                                         $0x291, %eax
  400f58: c3
                                  retq
  400f59: b8 75 01 00 00
                                         $0x175,%eax
                                  mov
  400f5e: c3
                                  reta
  400f5f: b8 9a 01 00 00
                                         $0x19a, %eax
                                  mov
  400f64: c3
                                  retq
  400f65: b8 d0 03 00 00
                                  mov
                                         $0x3d0, %eax
  400f6a: c3
                                  reta
  400f6b: b8 24 01 00 00
                                         $0x124, %eax
                                  mov
  400f70: c3
                                  retq
  400f71: b8 e1 03 00 00
                                         $0x3e1, %eax
                                 mov
  400f76: c3
                                  reta
  400f77: 48 83 ec 08
                                  sub
                                         $0x8,%rsp
```

```
400f7b: e8 20 07 00 00
                                callq 4016a0 <explode bomb>
 400f80: b8 00 00 00 00
                                 mov
                                        $0x0, %eax
 400f85: eb 06
                                 jmp
                                        400f8d <func switch+0x48>
 400f87: b8 d1 02 00 00
                                mov
                                        $0x2d1, %eax
 400f8c: c3
                                retq
  400f8d: 48 83 c4 08
                                 add
                                        $0x8,%rsp
 400f91: c3
                                 retq
0000000000400f92 <phase 3>:
 400f92: 53
                                 push
                                        %rbx
 400f93: 48 83 ec 10
                                 sub
                                        $0x10,%rsp
 400f97: c7 44 24 0c 00 00 00
                                 movl $0x0,0xc(%rsp)
 400f9e: 00
 400f9f: c7 44 24 08 00 00 00
                                 movl $0x0,0x8(%rsp)
 400fa6: 00
 400fa7: 48 8d 4c 24 08
                                 lea
                                        0x8(%rsp),%rcx
 400fac: 48 8d 54 24 0c
                                 lea
                                        0xc(%rsp),%rdx
 400fb1: be c9 31 40 00
                                 mov
                                        $0x4031c9, %esi
 400fb6: b8 00 00 00 00
                                 mov
                                        $0x0, %eax
 400fbb: e8 30 fc ff ff
                                callq 400bf0 < isoc99 sscanf@plt>
 400fc0: 83 f8 01
                                        $0x1, %eax
                                 cmp
 400fc3: 7e 0a
                                 jle
                                       400fcf <phase_3+0x3d>
 400fc5: 8b 44 24 08
                                 mov
                                        0x8(%rsp),%eax
 400fc9: 39 44 24 0c
                                      %eax,0xc(%rsp)
                               cmp
                               jne 400fd4 <phase_3+0x42>
callq 4016a0 <explode_bomb>
 400fcd: 75 05
 400fcf: e8 cc 06 00 00
 400fd4: 8b 7c 24 0c
                               mov 0xc(%rsp),%edi
                               callq 400f45 <func switch>
 400fd8: e8 68 ff ff ff
 400fdd: 89 c3
                                mov
                                        %eax, %ebx
 400fdf: 8b 7c 24 08
                               mov
                                      0x8(%rsp),%edi
 400fe3: e8 5d ff ff ff
                               callq 400f45 <func switch>
 400fe8: 39 c3
                                cmp
                                        %eax, %ebx
 400fea: 74 05
                                        400ff1 < phase 3+0x5f>
                               je 400ff1 <phase_3+0x5f>
callq 4016a0 <explode_bomb>
                                 jе
 400fec: e8 af 06 00 00
 400ff1: 48 83 c4 10
                                add
                                        $0x10,%rsp
 400ff5: 5b
                                 pop
                                        %rbx
 400ff6: c3
                                 retq
0000000000400ff7 <phase 4>:
 400ff7: 48 83 ec 18
                                        $0x18,%rsp
                                 sub
 400ffb: 48 8d 4c 24 08
                                      0x8(%rsp),%rcx
                                lea
 401000: 48 8d 54 24 0c
                                lea
                                       0xc(%rsp),%rdx
 401005: be c9 31 40 00
                               mov
                                      $0x4031c9,%esi
 40100a: b8 00 00 00 00
                               mov
                                        $0x0,%eax
 40100f: e8 dc fb ff ff
                                callq 400bf0 < isoc99 sscanf@plt>
 401014: 83 f8 01
                                cmp
                                        $0x1, %eax
 401017: 7f 05
                                jg
                                       40101e <phase 4+0x27>
 401019: e8 82 06 00 00
                               callq 4016a0 <explode bomb>
 40101e: 8b 44 24 0c
                                       0xc(%rsp), %eax
                                mov
 401022: 83 e0 Of
                                and
                                        $0xf, %eax
 401025: 89 44 24 0c
                                       %eax, 0xc (%rsp)
                               mov
 401029: 83 f8 Of
                                cmp
                                     $0xf,%eax
  40102c: 74 2c
                                      40105a <phase_4+0x63>
                                 jе
 40102e: b9 00 00 00 00
                                 mov
                                        $0x0, %ecx
```

```
401033: ba 00 00 00 00
                                 mov
                                        $0x0, %edx
 401038: 83 c2 01
                                 add
                                        $0x1, %edx
 40103b: 48 98
                                 cltq
 40103d: 8b 04 85 00 2b 40 00
                                        0x402b00(,%rax,4),%eax
                                 mov
 401044: 01 c1
                                        %eax,%ecx
                                 add
 401046: 83 f8 Of
                                        $0xf, %eax
                                 cmp
 401049: 75 ed
                                        401038 <phase 4+0x41>
                                 jne
 40104b: 89 44 24 0c
                                 mov
                                        %eax, 0xc (%rsp)
 40104f: 83 fa Of
                                        $0xf, %edx
                                 cmp
 401052: 75 06
                                        40105a < phase 4 + 0x63 >
                                 jne
 401054: 3b 4c 24 08
                                        0x8(%rsp), %ecx
                                 cmp
 401058: 74 05
                                        40105f < phase 4 + 0x68 >
                                 jе
 40105a: e8 41 06 00 00
                                 callq 4016a0 <explode bomb>
  40105f: 48 83 c4 18
                                 add
                                        $0x18,%rsp
 401063: c3
                                 retq
00000000000401064 <func rec>:
 401064: 48 83 ec 08
                                 sub
                                        $0x8,%rsp
 401068: 89 d0
                                 mov
                                        %edx, %eax
 40106a: 29 f0
                                        %esi,%eax
                                 sub
 40106c: 89 c1
                                        %eax, %ecx
                                 mov
 40106e: c1 e9 1f
                                shr
                                        $0x1f, %ecx
                                add
 401071: 01 c8
                                       %ecx, %eax
 401073: d1 f8
                                sar
                                       %eax
 401075: 8d 0c 30
                                lea
                                        (%rax,%rsi,1),%ecx
 401078: 39 f9
                                        %edi,%ecx
                                cmp
 40107a: 7e 0c
                                jle
                                        401088 <func rec+0x24>
 40107c: 8d 51 ff
                                lea
                                        -0x1(%rcx),%edx
 40107f: e8 e0 ff ff ff
                                 callq 401064 <func rec>
 401084: 01 c0
                                 add
                                       %eax,%eax
 401086: eb 15
                                 jmp
                                        40109d <func rec+0x39>
 401088: b8 00 00 00 00
                                 mov
                                        $0x0, %eax
 40108d: 39 f9
                                        %edi,%ecx
                                 cmp
 40108f: 7d 0c
                                        40109d <func rec+0x39>
                                jge
 401091: 8d 71 01
                                lea
                                        0x1(%rcx),%esi
 401094: e8 cb ff ff ff
                               callq 401064 <func rec>
 401099: 8d 44 00 01
                                        0x1(%rax, %rax, 1), %eax
                                 lea
 40109d: 48 83 c4 08
                                 add
                                        $0x8,%rsp
 4010a1: c3
                                 retq
00000000004010a2 <phase 5>:
  4010a2: 48 83 ec 18
                                 sub
                                        $0x18,%rsp
 4010a6: 48 8d 4c 24 08
                                 lea
                                        0x8(%rsp),%rcx
 4010ab: 48 8d 54 24 0c
                                lea
                                        0xc(%rsp),%rdx
 4010b0: be c9 31 40 00
                                        $0x4031c9, %esi
                                 mov
 4010b5: b8 00 00 00 00
                                 mov
                                        $0x0, %eax
 4010ba: e8 31 fb ff ff
                                 callq 400bf0 < isoc99 sscanf@plt>
 4010bf: 83 f8 02
                                 cmp
                                        $0x2, %eax
 4010c2: 75 07
                                        4010cb < phase 5 + 0x29 >
                                 jne
 4010c4: 83 7c 24 0c 0e
                                 cmpl
                                        $0xe,0xc(%rsp)
 4010c9: 76 05
                                 jbe
                                        4010d0 <phase 5+0x2e>
 4010cb: e8 d0 05 00 00
                                 callq 4016a0 <explode bomb>
  4010d0: ba 0e 00 00 00
                                        $0xe, %edx
                                 mov
 4010d5: be 00 00 00 00
                                 mov
                                        $0x0,%esi
```

```
4010da: 8b 7c 24 0c
                               mov 0xc(%rsp),%edi
                              callq 401064 <func rec>
 4010de: e8 81 ff ff
 4010e3: 83 f8 03
                                      $0x3,%eax
                               cmp
                                      4010ef <phase 5+0x4d>
 4010e6: 75 07
                               jne
 4010e8: 83 7c 24 08 03
                               cmpl
                                      $0x3,0x8(%rsp)
 4010ed: 74 05
                              jе
                                      4010f4 <phase 5+0x52>
 4010ef: e8 ac 05 00 00
                              callq 4016a0 <explode bomb>
 4010f4: 48 83 c4 18
                              add
                                      $0x18,%rsp
 4010f8: c3
                               retq
00000000004010f9 <phase 6>:
 4010f9: 41 56
                               push
                                      %r14
 4010fb: 41 55
                               push
                                      %r13
 4010fd: 41 54
                               push
                                      %r12
 4010ff: 55
                              push %rbp
 401100: 53
                              push %rbx
 401101: 48 83 ec 50
                                      $0x50,%rsp
                               sub
                              lea
 401105: 4c 8d 6c 24 30
                                      0x30(%rsp),%r13
                                   %r13,%rsi
 40110a: 4c 89 ee
                              mov
 40110d: e8 24 0b 00 00
                              callq 401c36 < read six numbers>
 401112: 4d 89 ee
                                     %r13,%r14
                               mov
 401115: 41 bc 00 00 00 00
                               mov
                                      $0x0,%r12d
 40111b: 4c 89 ed
                               mov
                                    %r13,%rbp
 40111e: 41 8b 45 00
                               mov
                                    0x0(%r13),%eax
 401122: 83 e8 01
                               sub
                                    $0x1,%eax
                              cmp
jbe
 401125: 83 f8 05
                              cmp
                                      $0x5, %eax
 401128: 76 05
                                      40112f <phase 6+0x36>
                              callq 4016a0 <explode_bomb>
 40112a: e8 71 05 00 00
 40112f: 41 83 c4 01
                              add
                                      $0x1,%r12d
 401133: 41 83 fc 06
                               cmp
                                      $0x6,%r12d
 401137: 74 22
                              jе
                                      40115b < phase 6 + 0x62 >
                              mov %r12d,%ebx
 401139: 44 89 e3
                              movslq %ebx,%rax
 40113c: 48 63 c3
 40113f: 8b 44 84 30
                              mov
                                      0x30(%rsp,%rax,4),%eax
 401143: 39 45 00
                                      %eax, 0x0 (%rbp)
                              cmp
 401146: 75 05
                               jne
                                     40114d <phase 6+0x54>
 401148: e8 53 05 00 00
                               callq 4016a0 <explode_bomb>
 40114d: 83 c3 01
                               add $0x1, %ebx
 401150: 83 fb 05
                               cmp
                                   $0x5,%ebx
 401153: 7e e7
                               jle
                                    40113c <phase 6+0x43>
                                    $0x4,%r13
 401155: 49 83 c5 04
                              add
 401159: eb c0
                               jmp
                                     40111b <phase 6+0x22>
 40115b: 48 8d 74 24 48
                                     0x48(%rsp),%rsi
                              lea
 401160: 4c 89 f0
                              mov
                                     %r14,%rax
 401163: b9 07 00 00 00
                                      $0x7, %ecx
                               mov
 401168: 89 ca
                              mov
                                     %ecx, %edx
 40116a: 2b 10
                                     (%rax),%edx
                              sub
 40116c: 89 10
                              mov
                                      %edx,(%rax)
 40116e: 48 83 c0 04
                              add
                                      $0x4, %rax
 401172: 48 39 f0
                              cmp
                                      %rsi,%rax
 401175: 75 f1
                                      401168 <phase 6+0x6f>
                              jne
 401177: be 00 00 00 00
                              mov
                                      $0x0,%esi
  40117c: eb 20
                               jmp
                                      40119e <phase 6+0xa5>
 40117e: 48 8b 52 08
                               mov
                                      0x8(%rdx),%rdx
```

```
401182: 83 c0 01
                                add
                                       $0x1, %eax
 401185: 39 c8
                                cmp
                                       %ecx, %eax
 401187: 75 f5
                                       40117e <phase 6+0x85>
                               jne
 401189: eb 05
                                jmp
                                       401190 <phase 6+0x97>
                               mov
 40118b: ba 60 41 60 00
                                       $0x604160, %edx
                                     %rdx,(%rsp,%rsi,2)
 401190: 48 89 14 74
                               mov
 401194: 48 83 c6 04
                               add
                                      $0x4,%rsi
 401198: 48 83 fe 18
                               cmp
                                      $0x18,%rsi
                               jе
 40119c: 74 15
                                       4011b3 <phase 6+0xba>
                              mov
 40119e: 8b 4c 34 30
                                       0x30(%rsp,%rsi,1),%ecx
 4011a2: 83 f9 01
                               cmp
                                    $0x1,%ecx
 4011a5: 7e e4
                               jle
                                    40118b <phase 6+0x92>
 4011a7: b8 01 00 00 00
                               mov
                                     $0x1,%eax
 4011ac: ba 60 41 60 00
                               mov
                                       $0x604160, %edx
 4011b1: eb cb
                                    40117e <phase 6+0x85>
                               j mp
 4011b3: 48 8b 1c 24
                               mov
                                      (%rsp),%rbx
                                    0x8(%rsp),%rax
 4011b7: 48 8d 44 24 08
                               lea
                               lea
 4011bc: 48 8d 74 24 30
                                       0x30(%rsp),%rsi
 4011c1: 48 89 d9
                               mov
                                    %rbx,%rcx
 4011c4: 48 8b 10
                               mov
                                      (%rax),%rdx
 4011c7: 48 89 51 08
                                       %rdx,0x8(%rcx)
                               mov
 4011cb: 48 83 c0 08
                                     $0x8,%rax
                                add
 4011cf: 48 39 f0
                                cmp
                                     %rsi,%rax
 4011d2: 74 05
                                       4011d9 <phase 6+0xe0>
                                jе
 4011d4: 48 89 d1
                                     %rdx,%rcx
                                mov
                                     4011c4 <phase_6+0xcb>
 4011d7: eb eb
                                jmp
 4011d9: 48 c7 42 08 00 00 00
                                movg $0x0,0x8(%rdx)
 4011e0: 00
 4011e1: bd 05 00 00 00
                                mov
                                       $0x5, %ebp
                                       0x8(%rbx),%rax
 4011e6: 48 8b 43 08
                                mov
 4011ea: 8b 00
                                mov
                                       (%rax),%eax
 4011ec: 39 03
                               cmp
                                       %eax, (%rbx)
 4011ee: 7d 05
                                     4011f5 <phase_6+0xfc>
                                jge
                              jge 4011f5 <phase_6+0xfc>
callq 4016a0 <explode_bomb>
 4011f0: e8 ab 04 00 00
 4011f5: 48 8b 5b 08
                                       0x8(%rbx),%rbx
                               mov
 4011f9: 83 ed 01
                                       $0x1, %ebp
                                sub
 4011fc: 75 e8
                                jne
                                       4011e6 <phase 6+0xed>
 4011fe: 8b 05 18 34 20 00
                                       0x203418(%rip), %eax
                                mov
60461c <last>
 401204: 83 f8 21
                                       $0x21, %eax
                                cmp
 401207: 75 05
                                       40120e <phase 6+0x115>
                                jne
                               callq 4016a0 <explode bomb>
 401209: e8 92 04 00 00
 40120e: 48 83 c4 50
                                add
                                     $0x50,%rsp
 401212: 5b
                                pop
                                       %rbx
 401213: 5d
                                       %rbp
                                pop
 401214: 41 5c
                                       %r12
                                pop
 401216: 41 5d
                                pop
                                       %r13
 401218: 41 5e
                                pop
                                       %r14
 40121a: c3
                                retq
000000000040121b <s3cret_ph4se>:
 40121b: 41 55
                                       %r13
                                push
          41 54
  40121d:
                                push
                                       %r12
  40121f:
          55
                                push
                                       %rbp
```

```
401220: 53
                               push
                                      %rbx
 401221: 48 83 ec 08
                               sub
                                      $0x8,%rsp
 401225: e8 4e 0a 00 00
                              callq 401c78 < read line>
 40122a: 49 89 c5
                              mov %rax,%r13
 40122d: bb 00 00 00 00
                              mov
                                     $0x0,%ebx
                              mov $0x1,%ebp
mov $0x1,%r12d
 401232: bd 01 00 00 00
 401237: 41 bc 01 00 00 00
 40123d: 41 Of b6 54 1d 00
                               movzbl 0x0(%r13,%rbx,1),%edx
 401243: 80 fa 62
                                cmp
                                     $0x62,%dl
 401246: 75 05
                               jne
                                    40124d <s3cret ph4se+0x32>
 401248: 83 ed 01
                                    $0x1,%ebp
                               sub
 40124b: eb 25
                               jmp
                                    401272 <s3cret ph4se+0x57>
 40124d: 80 fa 75
                                     $0x75,%dl
                                cmp
 401250: 75 06
                                      401258 <s3cret ph4se+0x3d>
                               jne
 401252: 41 83 ec 01
                                    $0x1,%r12d
                              sub
 401256: eb 1a
                               jmp
                                    401272 <s3cret ph4se+0x57>
                                     $0x72,%dl
 401258: 80 fa 72
                              cmp
 40125b: 75 05
                                      401262 <s3cret_ph4se+0x47>
                               jne
 40125d: 83 c5 01
                              add $0x1, %ebp
 401260: eb 10
                               jmp 401272 <s3cret ph4se+0x57>
 401262: 80 fa 69
                              cmp
                                     $0x69,%dl
 401265: 75 06
                              jne
                                    40126d <s3cret ph4se+0x52>
 401267: 41 83 c4 01
                              add $0x1,%r12d
 40126b: eb 05
                               jmp 401272 <s3cret ph4se+0x57>
                             callq 4016a0 <explode_bomb>
 40126d: e8 2e 04 00 00
 401272: 44 89 e0
                              mov
                                      %r12d, %eax
                                      %ebp,%edx
 401275: 89 ea
                              mov
 401277: Of b6 94 d0 20 41 60 movzbl 0x604120(%rax,%rdx,8),%edx
 40127e: 00
 40127f: 80 fa ff
                                      $0xff,%dl
                                cmp
 401282: 75 07
                                jne
                                      40128b <s3cret ph4se+0x70>
 401284: e8 17 04 00 00
                              callq 4016a0 <explode bomb>
 401289: eb 18
                                      4012a3 <s3cret ph4se+0x88>
                                jmp
 40128b: 80 fa 21
                              cmp
                                      $0x21,%dl
 40128e: 66 90
                              xchg %ax, %ax
                              jne 4012a3 <s3cret
mov $0x402b40,%edi
 401290: 75 11
                                     4012a3 <s3cret ph4se+0x88>
 401292: bf 40 2b 40 00
 401297: e8 74 f8 ff ff
                              callq 400b10 <puts@plt>
 40129c: e8 c6 03 00 00
                              callq 401667 <phase defused>
 4012a1: eb 0f
                                    4012b2 <s3cret ph4se+0x97>
                               qmŗ
 4012a3: 48 83 c3 01
                                      $0x1, %rbx
                               add
 4012a7: 48 83 fb 64
                              cmp
                                      $0x64,%rbx
 4012ab: 75 90
                                      40123d <s3cret ph4se+0x22>
                               jne
 4012ad: e8 ee 03 00 00
                              callq 4016a0 <explode_bomb>
 4012b2: 48 83 c4 08
4012b6: 5b
                                      $0x8,%rsp
                               add
                                      %rbx
                               pop
 4012b7: 5d
                               pop
                                      %rbp
 4012b8: 41 5c
                               pop
                                      %r12
 4012ba: 41 5d
                              pop
                                      %r13
 4012bc: c3
                               retq
 4012bd: 0f 1f 00
                               nopl
                                      (%rax)
00000000004012c0 <sig handler>:
```

sub

\$0x8,%rsp

4012c0: 48 83 ec 08

```
4012c4: bf 68 2b 40 00
                             mov $0x402b68,%edi
 4012c9: e8 42 f8 ff ff
                             callq 400b10 <puts@plt>
 4012ce: bf 03 00 00 00
                             mov $0x3,%edi
 4012d3: e8 88 f9 ff ff
                             callq 400c60 <sleep@plt>
                             mov $0x4030eb,%edi
 4012d8: bf eb 30 40 00
 4012dd: b8 00 00 00 00
                             mov $0x0,%eax
 4012e2: e8 49 f8 ff ff
                             callq 400b30 <printf@plt>
 4012e7: 48 8b 3d 12 33 20 00 mov 0x203312(%rip),%rdi
604600 <stdout@@GLIBC 2.2.5>
 4012ee: e8 ed f8 ff ff
                             callq 400be0 <fflush@plt>
 4012f3: bf 01 00 00 00
                             mov $0x1,%edi
 4012f8: e8 63 f9 ff ff
                             callq 400c60 <sleep@plt>
                             mov $0x4030f3,%edi
 4012fd: bf f3 30 40 00
                           callq 400b10 <puts@plt>
 401302: e8 09 f8 ff ff
 401307: bf 10 00 00 00
                             mov $0x10,%edi
 40130c: e8 2f f9 ff ff
                             callq 400c40 <exit@plt>
0000000000401311 <invalid phase>:
 401311: 48 83 ec 08 sub
                                    $0x8,%rsp
 401315: 48 89 fe
                             mov
                                   %rdi,%rsi
 401318: bf fb 30 40 00
                            mov
                                  $0x4030fb,%edi
                             mov $0x0,%eax
 40131d: b8 00 00 00 00
                            callq 400b30 <printf@plt>
 401322: e8 09 f8 ff ff
 401327: bf 08 00 00 00
                             mov $0x8,%edi
 40132c: e8 Of f9 ff ff
                        callq 400c40 <exit@plt>
0000000000401331 <string length>:
 401331: b8 00 00 00 00
                                   $0x0,%eax
                             mov
                             jmp
 401336: eb 0e
                                   401346 <string length+0x15>
                                  $0x1,%rdi
 401338: 48 83 c7 01
                             add
 40133c: 83 c0 01
                             add $0x1,%eax
 40133f: 3d 10 27 00 00
                            cmp
                                   $0x2710,%eax
 401344: 74 05
                             jе
                                   40134b <string length+0x1a>
 401346: 80 3f 00
                                   $0x0,(%rdi)
                             cmpb
 401349: 75 ed
                              jne
                                    401338 <string length+0x7>
 40134b: f3 c3
                              repz retq
000000000040134d <strings_not_equal>:
 40134d: 41 54
                                    %r12
                              push
 40134f: 55
                              push %rbp
 401350: 53
                              push
                                    %rbx
 401351: 48 89 fb
                             mov
                                    %rdi,%rbx
 401354: 48 89 f5
                             mov
                                   %rsi,%rbp
 401357: e8 d5 ff ff ff
                             callq 401331 <string_length>
 40135c: 41 89 c4
                             mov %eax,%r12d
 40135f: 48 89 ef
                                   %rbp,%rdi
                             mov
 401362: e8 ca ff ff ff
                             callq 401331 <string length>
                           mov $0x1,%edx
 401367: ba 01 00 00 00
                                   %eax,%r12d
 40136c: 41 39 c4
                             cmp
                             cmp %eax,%r12d
jne 4013b0 <strings_not_equal+0x63>
 40136f: 75 3f
 401371: Of b6 03
                             movzbl (%rbx),%eax
 401374: 84 c0
                             test %al,%al
                            je
 401376: 74 25
                                   40139d <strings not equal+0x50>
                              cmp
 401378: 3a 45 00
                                   0x0(%rbp),%al
```

```
40137b: 74 0a
                               jе
                                     401387 <strings not equal+0x3a>
 40137d: Of 1f 00
                              nopl
                                      (%rax)
 401380: eb 22
                              jmp
                                     4013a4 <strings not equal+0x57>
 401382: 3a 45 00
                             cmp
                                   0x0(%rbp),%al
                              jne
 401385: 75 24
                                    4013ab <strings not equal+0x5e>
 401387: 48 83 c3 01
                             add
                                     $0x1,%rbx
 40138b: 48 83 c5 01
                             add
                                   $0x1,%rbp
                             movzbl (%rbx),%eax
 40138f: Of b6 03
 401392: 84 c0
                             test %al,%al
                                   401382 <strings_not equal+0x35>
 401394: 75 ec
                              jne
 401396: ba 00 00 00 00
                             mov
                                   $0x0,%edx
 40139b: eb 13
                              jmp
                                   4013b0 <strings not equal+0x63>
 40139d: ba 00 00 00 00
                              mov
                                     $0x0, %edx
 4013a2: eb 0c
                                     4013b0 <strings not equal+0x63>
                               jmp
 4013a4: ba 01 00 00 00
                                     $0x1, %edx
                              mov
 4013a9: eb 05
                               jmp
                                   4013b0 <strings not equal+0x63>
 4013ab: ba 01 00 00 00
                                    $0x1,%edx
                             mov
                                    %edx,%eax
 4013b0: 89 d0
                              mov
 4013b2: 5b
                                     %rbx
                              pop
 4013b3: 5d
                                     %rbp
                               pop
 4013b4: 41 5c
                                     %r12
                               pop
 4013b6: c3
                               retq
00000000004013b7 <initialize bomb>:
 4013b7: 53
                                     %rbx
                               push
 4013b8: 48 81 ec 40 20 00 00
                                     $0x2040,%rsp
                               sub
 4013bf: be c0 12 40 00
                                    $0x4012c0,%esi
                               mov
 4013c4: bf 02 00 00 00
                                    $0x2,%edi
                             mov
 4013c9: e8 c2 f7 ff ff
                              callq 400b90 <signal@plt>
 4013ce: be 40 00 00 00
                              mov $0x40,%esi
 4013d3: 48 8d bc 24 00 20 00 lea
                                    0x2000(%rsp),%rdi
 4013da: 00
 4013db: e8 40 f8 ff ff
                              callq 400c20 <gethostname@plt>
 4013e0: 85 c0
                               test
                                     %eax, %eax
 4013e2: 75 13
                               jne
                                     4013f7 <initialize bomb+0x40>
 4013e4: 48 8b 3d 15 2e 20 00 mov 0x202e15(%rip),%rdi
604200 <host table>
 4013eb: bb 08 42 60 00
                                    $0x604208,%ebx
                               mov
 4013f0: 48 85 ff
                              test %rdi,%rdi
 4013f3: 75 16
                               jne 40140b <initialize bomb+0x54>
                              jmp
 4013f5: eb 50
                                     401447 <initialize bomb+0x90>
                             mov
 4013f7: bf a0 2b 40 00
                                     $0x402ba0,%edi
 4013fc: e8 Of f7 ff ff
                             callq 400b10 <puts@plt>
 401401: bf 08 00 00 00
                             mov $0x8,%edi
                              callq 400c40 <exit@plt>
 401406: e8 35 f8 ff ff
 40140b: 48 8d b4 24 00 20 00 lea 0x2000(%rsp),%rsi
 401412: 00
 401413: e8 c8 f6 ff ff
                            callq 400ae0 <strcasecmp@plt>
 401418: 85 c0
                                     %eax, %eax
                               test
 40141a: 74 3f
                              jе
                                     40145b <initialize bomb+0xa4>
 40141c: 48 83 c3 08
                                     $0x8,%rbx
                             add
 401420: 48 8b 7b f8
                              mov
                                     -0x8(%rbx),%rdi
 401424: 48 85 ff
                              test %rdi,%rdi
 401427: 75 e2
                              jne 40140b <initialize bomb+0x54>
```

```
401429: eb 1c
                                 jmp
                                        401447 <initialize bomb+0x90>
  40142b: 48 89 e6
                                 mov
                                        %rsp,%rsi
  40142e: bf 0c 31 40 00
                                        $0x40310c, %edi
                                 mov
  401433: b8 00 00 00 00
                                 mov
                                        $0x0, %eax
  401438: e8 f3 f6 ff ff
                                 callq 400b30 <printf@plt>
  40143d: bf 08 00 00 00
                                        $0x8,%edi
                                 mov
  401442: e8 f9 f7 ff ff
                                 callq 400c40 <exit@plt>
  401447: bf d8 2b 40 00
                                 mov
                                        $0x402bd8, %edi
 40144c: e8 bf f6 ff ff
                                 callq 400b10 <puts@plt>
  401451: bf 08 00 00 00
                                 mov
                                        $0x8, %edi
 401456: e8 e5 f7 ff ff
                                 callq 400c40 <exit@plt>
  40145b: 48 89 e7
                                        %rsp,%rdi
                                 mov
  40145e: e8 5e 12 00 00
                                 callq 4026c1 <init driver>
  401463:
         85 c0
                                        %eax, %eax
                                 test
  401465:
          78 c4
                                        40142b <initialize bomb+0x74>
                                 js
  401467: 48 81 c4 40 20 00 00
                                        $0x2040,%rsp
                                 add
  40146e:
           5b
                                 pop
                                        %rbx
  40146f:
           с3
                                 retq
0000000000401470 <welcome message>:
  401470: 83 ff 01
                                        $0x1, %edi
                                 cmp
         0f 85 a8 00 00 00
  401473:
                                        401521 <welcome message+0xb1>
                                 jne
  401479: 48 83 ec 08
                                 sub
                                        $0x8,%rsp
  40147d: bf 10 2c 40 00
                                        $0x402c10,%edi
                                 mov
  401482: e8 89 f6 ff ff
                                 callq 400b10 <puts@plt>
  401487: bf 50 2c 40 00
                                        $0x402c50, %edi
                                 mov
 40148c: e8 7f f6 ff ff
                                callq 400b10 <puts@plt>
  401491: bf 90 2c 40 00
                                        $0x402c90, %edi
                                 mov
  401496: e8 75 f6 ff ff
                                 callq 400b10 <puts@plt>
  40149b: bf d0 2c 40 00
                                        $0x402cd0, %edi
                                 mov
 4014a0: e8 6b f6 ff ff
                                 callq 400b10 <puts@plt>
  4014a5: bf 10 2d 40 00
                                        $0x402d10, %edi
                                 mov
 4014aa: e8 61 f6 ff ff
                                 callq 400b10 <puts@plt>
  4014af: bf 50 2d 40 00
                                        $0x402d50, %edi
                                 mov
  4014b4: e8 57 f6 ff ff
                                 callq 400b10 <puts@plt>
  4014b9: bf 90 2d 40 00
                                        $0x402d90, %edi
                                 mov
  4014be: e8 4d f6 ff ff
                                 callq 400b10 <puts@plt>
  4014c3: bf c8 2d 40 00
                                 mov
                                        $0x402dc8, %edi
  4014c8: e8 43 f6 ff ff
                                 callq 400b10 <puts@plt>
  4014cd: bf 00 2e 40 00
                                        $0x402e00, %edi
                                 mov
  4014d2: e8 39 f6 ff ff
                                 callq 400b10 <puts@plt>
  4014d7: bf 40 2e 40 00
                                 mov
                                        $0x402e40, %edi
  4014dc: e8 2f f6 ff ff
                                 callq 400b10 <puts@plt>
  4014e1: bf 80 2e 40 00
                                        $0x402e80, %edi
                                 mov
  4014e6: e8 25 f6 ff ff
                                 callq 400b10 <puts@plt>
  4014eb: bf c0 2e 40 00
                                 mov
                                        $0x402ec0, %edi
  4014f0: e8 1b f6 ff ff
                                 callq 400b10 <puts@plt>
  4014f5: bf 00 2f 40 00
                                 mov
                                        $0x402f00,%edi
  4014fa: e8 11 f6 ff ff
                                 callq 400b10 <puts@plt>
  4014ff: bf 40 2f 40 00
                                 mov
                                        $0x402f40,%edi
  401504: e8 07 f6 ff ff
                                 callq 400b10 <puts@plt>
  401509: bf 80 2f 40 00
                                 mov
                                        $0x402f80, %edi
  40150e: e8 fd f5 ff ff
                                 callq 400b10 <puts@plt>
  401513: bf c0 2f 40 00
                                 mov
                                        $0x402fc0, %edi
```

```
callq 400b10 <puts@plt>
  401518: e8 f3 f5 ff ff
  40151d: 48 83 c4 08
                                  add
                                         $0x8,%rsp
  401521: f3 c3
                                 repz retq
0000000000401523 <initialize bomb solve>:
  401523: f3 c3
                                  repz retq
0000000000401525 <blank line>:
 401525: 55
                                 push
                                        %rbp
 401526: 53
                                push %rbx
 401527: 48 83 ec 08
                                sub $0x8,%rsp
 40152b: 48 89 fb
                                mov %rdi,%rbx
                              jmp 401547 <blank_line+0x22>
callq 400c70 <__ctype_b_loc@plt>
add $0x1,%rbx
 40152e: eb 17
 401530: e8 3b f7 ff ff
 401535: 48 83 c3 01
 401539: 48 Of be ed
                               movsbq %bpl,%rbp
 40153d: 48 8b 00 mov (%rax),%rax

401540: f6 44 68 01 20 testb $0x20,0x1(%rax,%rbp,2)
 401545: 74 Of
                                je 401556 <blank line+0x31>
                                movzbl (%rbx),%ebp
 401547: Of b6 2b
                                test %bpl,%bpl
 40154a: 40 84 ed
                               jne 401530 <br/>blank_line+0xb> mov $0x1,%eax
 40154d: 75 e1
 40154f: b8 01 00 00 00
                                 jmp     40155b <blank_line+0x36>
mov     $0x0, %eax
add     $0x8, %rsp
 401554: eb 05
                              mov
Anr.c
 401556: b8 00 00 00 00
 40155b: 48 83 c4 08
                                add
 40155f: 5b
                                        %rbx
                                pop
 401560: 5d
                                 pop
                                        %rbp
 401561: c3
                                  retq
0000000000401562 <skip>:
  401562: 53
                                 push %rbx
  401563: 48 63 05 b6 30 20 00 movslg 0x2030b6(%rip),%rax
604620 <num input strings>
 40156a: 48 8d 3c 80
                                 lea
                                        (%rax,%rax,4),%rdi
  40156e: 48 c1 e7 04
                                 shl
                                        $0x4,%rdi
 401572: 48 81 c7 40 46 60 00 add $0x604640,%rdi
401579: 48 8b 15 a8 30 20 00 mov 0x2030a8(%rip),%rdx
604628 <infile>
                                mov $0x50,%esi
 401580: be 50 00 00 00
                              callq 400b80 <fgets@plt>
 401585: e8 f6 f5 ff ff
                                 mov
 40158a: 48 89 c3
                                        %rax,%rbx
 40158d: 48 85 c0
                                test %rax,%rax
                                je 40159e <skip+0x3c> mov %rax,%rdi
 401590: 74 Oc
 401592: 48 89 c7
                               callq 401525 <blank_line>
 401595: e8 8b ff ff ff
 40159a: 85 c0
                                test %eax, %eax
                                jne 401563 <skip+0x1>
mov %rbx,%rax
 40159c: 75 c5
                                        %rbx,%rax
 40159e: 48 89 d8
                                       %rbx
                                pop
 4015a1: 5b
 4015a2: c3
                                 retq
00000000004015a3 <send msg>:
  4015a3: 48 81 ec 08 40 00 00 sub $0x4008,%rsp
```

```
4015aa: 89 fe
                                  mov
                                         %edi,%esi
  4015ac:
          44 8b 05 6d 30 20 00
                                  mov
                                         0x20306d(%rip),%r8d
604620 <num input strings>
  4015b3:
          41 8d 40 ff
                                  lea
                                         -0x1(%r8), %eax
  4015b7: 48 98
                                  cltq
           4c 8d 0c 80
  4015b9:
                                  lea
                                         (%rax, %rax, 4), %r9
          49 c1 e1 04
  4015bd:
                                  shl
                                         $0x4,%r9
  4015c1: 49 81 c1 40 46 60 00
                                  add
                                         $0x604640,%r9
  4015c8: 4c 89 cf
                                  mov
                                         %r9,%rdi
  4015cb:
           b8 00 00 00 00
                                  mov
                                         $0x0, %eax
 4015d0: 48 c7 c1 ff ff ff
                                  mov
                                         $0xffffffffffffff,%rcx
  4015d7: f2 ae
                                  repnz scas %es:(%rdi),%al
  4015d9: 48 f7 d1
                                  not
                                         %rcx
  4015dc:
          48 83 c1 63
                                  add
                                         $0x63,%rcx
          48 81 f9 00 20 00 00
  4015e0:
                                         $0x2000, %rcx
                                  cmp
  4015e7: 76 14
                                         4015fd < send msg + 0x5a >
                                  ibe
 4015e9: bf 00 30 40 00
                                  mov
                                         $0x403000, %edi
  4015ee:
           e8 3d f5 ff ff
                                  callq 400b30 <printf@plt>
  4015f3: bf 08 00 00 00
                                  mov
                                         $0x8,%edi
  4015f8: e8 43 f6 ff ff
                                  callq 400c40 <exit@plt>
  4015fd: 85 f6
                                         %esi,%esi
                                  test
  4015ff: b8 26 31 40 00
                                  mov
                                         $0x403126, %eax
  401604: b9 2e 31 40 00
                                  mov
                                         $0x40312e, %ecx
  401609: 48 Of 45 c8
                                  cmovne %rax, %rcx
  40160d: 8b 15 cd 2b 20 00
                                         0x202bcd(%rip),%edx
                                  mov
6041e0 <bomb id>
          be 37 31 40 00
  401613:
                                         $0x403137,%esi
                                  mov
                                         0x2000(%rsp),%rdi
  401618: 48 8d bc 24 00 20 00
                                  lea
  40161f:
          0.0
  401620:
          b8 00 00 00 00
                                  mov
                                         $0x0, %eax
  401625: e8 06 f6 ff ff
                                  callq 400c30 <sprintf@plt>
  40162a: 49 89 e0
                                  mov
                                         %rsp,%r8
  40162d: b9 00 00 00 00
                                         $0x0, %ecx
                                  mov
  401632: 48 8d 94 24 00 20 00
                                         0x2000(%rsp),%rdx
                                  lea
 401639: 00
  40163a: be c0 41 60 00
                                  mov
                                         $0x6041c0, %esi
  40163f: bf d5 41 60 00
                                         $0x6041d5, %edi
                                  mov
  401644: e8 16 12 00 00
                                  callq 40285f <driver post>
 401649: 85 c0
                                  test
                                         %eax, %eax
 40164b:
          79 12
                                         40165f <send msg+0xbc>
                                  jns
           48 89 e7
 40164d:
                                  mov
                                         %rsp,%rdi
  401650:
          e8 bb f4 ff ff
                                  callq 400b10 <puts@plt>
  401655: bf 00 00 00 00
                                         $0x0, %edi
                                  mov
  40165a: e8 e1 f5 ff ff
                                  callq 400c40 <exit@plt>
          48 81 c4 08 40 00 00
  40165f:
                                         $0x4008,%rsp
                                  add
  401666:
           с3
                                  reta
0000000000401667 <phase defused>:
  401667: 48 83 ec 08
                                  sub
                                         $0x8,%rsp
  40166b: bf 01 00 00 00
                                  mov
                                         $0x1, %edi
  401670: e8 2e ff ff ff
                                  callq 4015a3 <send msg>
  401675: 83 3d a4 2f 20 00 05
                                  cmpl
                                         $0x5,0x202fa4(%rip)
604620 <num input strings>
  40167c:
           7e 1d
                                  jle
                                         40169b <phase defused+0x34>
```

```
40167e: 83 3d 97 2f 20 00 21
                                          $0x21,0x202f97(%rip)
                                   cmpl
60461c <last>
  401685:
          74 14
                                          40169b <phase defused+0x34>
                                   jе
          bf 28 30 40 00
  401687:
                                   MOV
                                          $0x403028, %edi
  40168c:
          e8 7f f4 ff ff
                                   callq 400b10 <puts@plt>
          bf 58 30 40 00
  401691:
                                          $0x403058, %edi
                                   mov
          e8 75 f4 ff ff
  401696:
                                   callq 400b10 <puts@plt>
  40169b: 48 83 c4 08
                                   add
                                          $0x8,%rsp
  40169f: c3
                                   retq
00000000004016a0 <explode bomb>:
  4016a0: 48 81 ec d8 00 00 00
                                   sub
                                          $0xd8,%rsp
  4016a7: 83 3d 72 2f 20 00 06
                                   cmpl
                                          $0x6,0x202f72(%rip)
604620 <num input strings>
           77 60
  4016ae:
                                   jа
                                          401710 < explode bomb + 0x70 >
  4016b0:
           8b 05 6a 2f 20 00
                                          0x202f6a(%rip), %eax
                                   mov
604620 <num input strings>
           ff 24 c5 20 33 40 00
                                   jmpq
                                          *0x403320(,%rax,8)
  4016b6:
          bf 43 31 40 00
  4016bd:
                                          $0x403143, %edi
                                   mov
  4016c2: e8 49 f4 ff ff
                                   callq 400b10 <puts@plt>
  4016c7: eb 47
                                          401710 < explode bomb + 0x70 >
                                   qmŗ
                                          $0x4030a0, %edi
  4016c9:
          bf a0 30 40 00
                                   mov
  4016ce: e8 3d f4 ff ff
                                   callq 400b10 <puts@plt>
  4016d3: eb 3b
                                   jmp
                                          401710 < explode bomb + 0x70 >
  4016d5: bf 48 31 40 00
                                          $0x403148, %edi
                                   mov
  4016da: e8 31 f4 ff ff
                                   callq 400b10 <puts@plt>
           90
 4016df:
                                   nop
  4016e0: eb 2e
                                   jmp
                                          401710 < explode bomb + 0x70 >
  4016e2: bf 5d 31 40 00
                                          $0x40315d, %edi
                                   mov
  4016e7:
          e8 24 f4 ff ff
                                   callq 400b10 <puts@plt>
  4016ec: eb 22
                                          401710 < explode bomb + 0x70 >
                                   jmp
  4016ee: bf 73 31 40 00
                                   mov
                                          $0x403173, %edi
  4016f3: e8 18 f4 ff ff
                                          400b10 <puts@plt>
                                   callq
  4016f8: eb 16
                                   jmp
                                          401710 < explode bomb + 0x70 >
  4016fa: bf 8a 31 40 00
                                          $0x40318a, %edi
                                   mov
  4016ff: e8 0c f4 ff ff
                                   callq 400b10 <puts@plt>
  401704:
           eb 0a
                                          401710 < explode bomb + 0x70 >
                                   jmp
          bf 93 31 40 00
  401706:
                                  mov
                                          $0x403193, %edi
          e8 00 f4 ff ff
  40170b:
                                   callq 400b10 <puts@plt>
  401710: 48 89 e7
                                  mov
                                          %rsp,%rdi
  401713: b9 19 00 00 00
                                  mov
                                          $0x19, %ecx
  401718: b8 00 00 00 00
                                  mov
                                          $0x0, %eax
  40171d: f3 48 ab
                                   rep stos %rax, %es: (%rdi)
  401720: c6 04 24 53
                                  movb
                                          $0x53, (%rsp)
          c6 44 24 01 6f
                                          $0x6f,0x1(%rsp)
  401724:
                                   movb
          c6 44 24 02 20
  401729:
                                  movb
                                          $0x20,0x2(%rsp)
          c6 44 24 03 79
                                          $0x79,0x3(%rsp)
  40172e:
                                  movb
  401733: c6 44 24 04 6f
                                  movb
                                          $0x6f,0x4(%rsp)
  401738:
           c6 44 24 05 75
                                          $0x75,0x5(%rsp)
                                  movb
          c6 44 24 06 20
  40173d:
                                  movb
                                          $0x20,0x6(%rsp)
  401742: c6 44 24 07 6d
                                  movb
                                          $0x6d,0x7(%rsp)
                                          $0x61,0x8(%rsp)
  401747: c6 44 24 08 61
                                  movb
           c6 44 24 09 64
  40174c:
                                  movb
                                          $0x64,0x9(%rsp)
  401751:
          c6 44 24 0a 65
                                  movb
                                          $0x65,0xa(%rsp)
```

```
$0x20,0xb(%rsp)
401756:
          c6 44 24 0b 20
                                  movb
40175b:
         c6 44 24 0c 69
                                  movb
                                          $0x69,0xc(%rsp)
401760:
          c6 44 24 0d 74
                                          $0x74,0xd(%rsp)
                                  movb
401765:
          c6 44 24 0e 20
                                  movb
                                          $0x20,0xe(%rsp)
40176a:
                                          $0x74,0xf(%rsp)
         c6 44 24 Of
                      74
                                  movb
          c6 44 24 10
40176f:
                       6f
                                          $0x6f,0x10(%rsp)
                                  movb
401774:
         c6 44 24 11
                       20
                                  movb
                                          $0x20,0x11(%rsp)
401779:
          c6 44 24 12
                       74
                                          $0x74,0x12(%rsp)
                                  movb
          c6 44 24 13
40177e:
                       68
                                          $0x68,0x13(%rsp)
                                  movb
401783:
          c6 44 24 14
                       65
                                          $0x65,0x14(%rsp)
                                  movb
401788:
          c6 44 24 15
                       20
                                          $0x20,0x15(%rsp)
                                  movb
40178d:
          c6 44 24 16
                      73
                                          $0x73,0x16(%rsp)
                                  movb
401792:
         c6 44 24 17 33
                                  movb
                                          $0x33,0x17(%rsp)
401797:
          c6 44 24 18
                       63
                                          $0x63,0x18(%rsp)
                                  movb
          c6 44 24 19
40179c:
                      72
                                          $0x72,0x19(%rsp)
                                  movb
4017a1:
          c6 44 24 1a
                                          $0x65,0x1a(%rsp)
                      65
                                  movb
         c6 44 24 1b
4017a6:
                      74
                                          $0x74,0x1b(%rsp)
                                  movb
4017ab:
          c6 44 24
                   1c
                       20
                                          $0x20,0x1c(%rsp)
                                  movb
          c6 44 24 1d 70
4017b0:
                                  movb
                                          $0x70,0x1d(%rsp)
4017b5:
          c6 44 24 1e
                      68
                                          $0x68,0x1e(%rsp)
                                  movb
4017ba:
         c6 44 24 1f
                       61
                                          $0x61,0x1f(%rsp)
                                  movb
4017bf:
          c6 44 24 20
                       73
                                          $0x73,0x20(%rsp)
                                  movb
          c6 44 24 21
4017c4:
                       65
                                  movb
                                          $0x65,0x21(%rsp)
4017c9:
          c6 44 24 22
                                          $0x2e,0x22(%rsp)
                       2e
                                  movb
         c6 44 24 23
4017ce:
                       20
                                          $0x20,0x23(%rsp)
                                  movb
4017d3:
          c6 44 24 24
                       20
                                          $0x20,0x24(%rsp)
                                  movb
          c6 44 24 25
4017d8:
                      4e
                                          $0x4e,0x25(%rsp)
                                  movb
                                          $0x69,0x26(%rsp)
4017dd:
          c6 44 24 26
                      69
                                  movb
4017e2:
         c6 44 24 27
                       63
                                          $0x63,0x27(%rsp)
                                  movb
4017e7:
          c6 44 24 28
                                          $0x65,0x28(%rsp)
                       65
                                  movb
4017ec:
          c6 44 24 29
                       2с
                                          $0x2c,0x29(%rsp)
                                  movb
         c6 44 24 2a
                                          $0x20,0x2a(%rsp)
4017f1:
                      20
                                  movb
4017f6:
         c6 44 24 2b
                      62
                                          $0x62,0x2b(%rsp)
                                  movb
4017fb:
          c6 44 24 2c 75
                                  movb
                                          $0x75,0x2c(%rsp)
          c6 44 24 2d 74
401800:
                                  movb
                                          $0x74,0x2d(%rsp)
          c6 44 24 2e
401805:
                      0a
                                  movb
                                          $0xa,0x2e(%rsp)
40180a:
         c6 44 24 2f
                       64
                                          $0x64,0x2f(%rsp)
                                  movb
40180f:
          c6 44 24 30
                       6f
                                  movb
                                          $0x6f,0x30(%rsp)
          c6 44 24 31
401814:
                                          $0x6e,0x31(%rsp)
                       6e
                                  movb
                                          $0x27,0x32(%rsp)
401819:
          c6 44 24 32
                       27
                                  movb
40181e:
         c6 44 24 33
                       74
                                  movb
                                          $0x74,0x33(%rsp)
401823:
          c6 44 24 34
                       20
                                  movb
                                          $0x20,0x34(%rsp)
          c6 44 24 35
401828:
                      74
                                          $0x74,0x35(%rsp)
                                  movb
          c6 44 24 36
40182d:
                      65
                                  movb
                                          $0x65,0x36(%rsp)
          c6 44 24 37
                                          $0x6c,0x37(%rsp)
401832:
                       6c
                                  movb
          c6 44 24
401837:
                   38
                       6c
                                  movb
                                          $0x6c,0x38(%rsp)
          c6 44 24 39
40183c:
                       20
                                  movb
                                          $0x20,0x39(%rsp)
401841:
          c6 44 24 3a
                      61
                                  movb
                                          $0x61,0x3a(%rsp)
401846:
          c6 44 24 3b
                                          $0x6e,0x3b(%rsp)
                       6e
                                  movb
          c6 44 24 3c
40184b:
                      79
                                  movb
                                          $0x79,0x3c(%rsp)
          c6 44 24 3d 6f
401850:
                                  movb
                                          $0x6f,0x3d(%rsp)
401855:
          c6 44 24 3e
                      6e
                                          $0x6e,0x3e(%rsp)
                                  movb
40185a:
          c6 44 24 3f
                       65
                                  movb
                                          $0x65,0x3f(%rsp)
40185f:
          c6 44 24 40
                                  movb
                                          $0x20,0x40(%rsp)
```

```
401864:
          c6 44 24 41 61
                                          $0x61,0x41(%rsp)
                                  movb
401869:
         c6 44 24 42
                       62
                                  movb
                                          $0x62,0x42(%rsp)
40186e:
          c6 44 24 43
                       6f
                                          $0x6f,0x43(%rsp)
                                  movb
401873:
          c6 44 24 44
                      75
                                  movb
                                          $0x75,0x44(%rsp)
                                          $0x74,0x45(%rsp)
         c6 44 24 45
401878:
                      74
                                  movb
          c6 44 24 46
40187d:
                       20
                                          $0x20,0x46(%rsp)
                                  movb
         c6 44 24 47
401882:
                       69
                                  movb
                                          $0x69,0x47(%rsp)
401887:
          c6 44 24 48
                       74
                                          $0x74,0x48(%rsp)
                                  movb
         c6 44 24 49
40188c:
                       20
                                          $0x20,0x49(%rsp)
                                  movb
401891:
          c6 44 24 4a
                       28
                                          $0x28,0x4a(%rsp)
                                  movb
401896:
          c6 44 24 4b
                       65
                                          $0x65,0x4b(%rsp)
                                  movb
40189b:
          c6 44 24 4c
                      73
                                          $0x73,0x4c(%rsp)
                                  movb
         c6 44 24 4d 70
4018a0:
                                  movb
                                          $0x70,0x4d(%rsp)
4018a5:
          c6 44 24 4e
                       65
                                          $0x65,0x4e(%rsp)
                                  movb
         c6 44 24 4f
4018aa:
                       63
                                          $0x63,0x4f(%rsp)
                                  movb
4018af:
          c6 44 24 50
                       69
                                          $0x69,0x50(%rsp)
                                  movb
         c6 44 24 51
4018b4:
                       61
                                          $0x61,0x51(%rsp)
                                  movb
4018b9:
          c6 44 24
                   52
                       6с
                                          $0x6c,0x52(%rsp)
                                  movb
          c6 44 24 53
4018be:
                       6c
                                  movb
                                          $0x6c,0x53(%rsp)
4018c3:
          c6 44 24 54
                      79
                                          $0x79,0x54(%rsp)
                                  movb
         c6 44 24 55
4018c8:
                      20
                                          $0x20,0x55(%rsp)
                                  movb
4018cd:
          c6 44 24 56
                       6f
                                          $0x6f,0x56(%rsp)
                                  movb
          c6 44 24 57
4018d2:
                       6e
                                  movb
                                          $0x6e,0x57(%rsp)
          c6 44 24 58
                                          $0x20,0x58(%rsp)
4018d7:
                       20
                                  movb
4018dc:
         c6 44 24 59
                       50
                                          $0x50,0x59(%rsp)
                                  movb
4018e1:
          c6 44 24
                   5a
                      69
                                          $0x69,0x5a(%rsp)
                                  movb
          c6 44 24 5b
4018e6:
                      61
                                  movb
                                          $0x61,0x5b(%rsp)
4018eb:
          c6 44 24 5c
                      7a
                                  movb
                                          $0x7a,0x5c(%rsp)
4018f0:
         c6 44 24 5d
                       7a
                                          $0x7a,0x5d(%rsp)
                                  movb
4018f5:
          c6 44 24 5e
                                          $0x61,0x5e(%rsp)
                       61
                                  movb
4018fa:
          c6 44 24 5f
                       29
                                          0x29,0x5f(rsp)
                                  movb
         c6 44 24 60
4018ff:
                       2e
                                  movb
                                          $0x2e,0x60(%rsp)
         c6 44 24 61
401904:
                       0a
                                          $0xa,0x61(%rsp)
                                  movb
401909:
          c6 44 24 62
                                          $0x49,0x62(%rsp)
                      49
                                  movb
          c6 44 24 63
40190e:
                                          $0x66,0x63(%rsp)
                       66
                                  movb
          c6 44 24 64
401913:
                      20
                                  movb
                                          $0x20,0x64(%rsp)
401918:
         c6 44 24 65
                      79
                                          $0x79,0x65(%rsp)
                                  movb
40191d:
          c6 44 24 66
                                          $0x6f,0x66(%rsp)
                       6f
                                  movb
          c6 44 24 67
401922:
                       75
                                          $0x75,0x67(%rsp)
                                  movb
401927:
          c6 44 24 68
                      20
                                          $0x20,0x68(%rsp)
                                  movb
          c6 44 24 69
40192c:
                      64
                                  movb
                                          $0x64,0x69(%rsp)
401931:
          c6 44 24 6a
                      6f
                                  movb
                                          $0x6f,0x6a(%rsp)
401936:
          c6 44 24 6b
                      20
                                          $0x20,0x6b(%rsp)
                                  movb
40193b:
          c6 44 24 6c
                      79
                                  movb
                                          $0x79,0x6c(%rsp)
          c6 44 24 6d 6f
401940:
                                          $0x6f,0x6d(%rsp)
                                  movb
401945:
          c6 44 24 6e
                       75
                                  movb
                                          $0x75,0x6e(%rsp)
          c6 44 24 6f
40194a:
                       20
                                  movb
                                          $0x20,0x6f(%rsp)
40194f:
          c6 44 24 70
                      77
                                  movb
                                          $0x77,0x70(%rsp)
401954:
          c6 44 24 71
                       6f
                                          $0x6f,0x71(%rsp)
                                  movb
          c6 44 24 72
401959:
                       6e
                                  movb
                                          $0x6e,0x72(%rsp)
          c6 44 24 73
40195e:
                       27
                                  movb
                                          $0x27,0x73(%rsp)
401963:
          c6 44 24 74
                       74
                                          $0x74,0x74(%rsp)
                                  movb
                                          $0x20,0x75(%rsp)
401968:
          c6 44 24 75
                       20
                                  movb
          c6 44 24 76
40196d:
                      67
                                  movb
                                          $0x67,0x76(%rsp)
```

```
c6 44 24 77 65
401972:
                                  movb
                                         0x65,0x77(%rsp)
401977:
         c6 44 24 78 74
                                  movb
                                         $0x74,0x78(%rsp)
         c6 44 24 79 20
40197c:
                                         $0x20,0x79(%rsp)
                                  movb
401981:
         c6 44 24 7a 61
                                  movb
                                         $0x61,0x7a(%rsp)
         c6 44 24 7b 6e
401986:
                                         $0x6e,0x7b(%rsp)
                                  movb
40198b:
         c6 44 24 7c 79
                                         $0x79,0x7c(%rsp)
                                  movb
401990:
         c6 44 24 7d 20
                                  movb
                                         $0x20,0x7d(%rsp)
401995:
         c6 44 24 7e 65
                                         $0x65,0x7e(%rsp)
                                  movb
         c6 44 24 7f 78
40199a:
                                         $0x78,0x7f(%rsp)
                                  movb
40199f:
         c6 84 24 80 00 00 00
                                  movb
                                         $0x74,0x80(%rsp)
4019a6:
         74
4019a7:
         c6 84 24 81 00 00 00
                                         $0x72,0x81(%rsp)
                                  movb
4019ae:
         72
4019af:
         c6 84 24 82 00 00 00
                                         $0x61,0x82(%rsp)
                                  movb
4019b6:
         61
4019b7:
         c6 84 24 83 00 00 00
                                         $0x20,0x83(%rsp)
                                  movb
4019be:
         20
4019bf:
                                         $0x63,0x84(%rsp)
         c6 84 24 84 00 00 00
                                  movb
4019c6:
         63
4019c7:
         c6 84 24 85 00 00 00
                                         $0x72,0x85(%rsp)
                                  movb
4019ce:
         72
4019cf:
         c6 84 24 86 00 00 00
                                         $0x65,0x86(%rsp)
                                  movb
4019d6:
          65
4019d7:
                                         $0x64,0x87(%rsp)
         c6 84 24 87 00 00 00
                                  movb
4019de:
         64
4019df:
         c6 84 24 88 00 00 00
                                         $0x69,0x88(%rsp)
                                  movb
4019e6:
         69
4019e7:
         c6 84 24 89 00 00 00
                                         $0x74,0x89(%rsp)
                                  movb
4019ee:
         74
4019ef:
         c6 84 24 8a 00 00 00
                                         $0x21,0x8a(%rsp)
                                  movb
4019f6:
         21
4019f7:
         c6 84 24 8b 00 00 00
                                  movb
                                         $0x20,0x8b(%rsp)
4019fe:
         20
4019ff:
         c6 84 24 8c 00 00 00
                                         $0x61,0x8c(%rsp)
                                  movb
401a06:
          61
                                         $0x6e,0x8d(%rsp)
401a07:
         c6 84 24 8d 00 00 00
                                  movb
401a0e:
          6e
                                         $0x79,0x8e(%rsp)
401a0f:
         c6 84 24 8e 00 00 00
                                  movb
401a16:
         79
401a17:
         c6 84 24 8f 00 00 00
                                         $0x77,0x8f(%rsp)
                                  movb
         77
401a1e:
401a1f:
         c6 84 24 90 00 00 00
                                  movb
                                         $0x61,0x90(%rsp)
401a26:
          61
                                         $0x79,0x91(%rsp)
401a27:
         c6 84 24 91 00 00 00
                                  movb
401a2e:
         79
401a2f:
         c6 84 24 92 00 00 00
                                  movb
                                         $0x73,0x92(%rsp)
401a36:
         7.3
401a37:
         c6 84 24 93 00 00 00
                                  movb
                                         $0x2c,0x93(%rsp)
401a3e:
         2c
401a3f:
         c6 84 24 94 00 00 00
                                  movb
                                         $0xa,0x94(%rsp)
401a46:
         0a
                                  movb
401a47:
         c6 84 24 95 00 00 00
                                         $0x66,0x95(%rsp)
401a4e:
          66
401a4f:
         c6 84 24 96 00 00 00
                                  movb
                                         $0x69,0x96(%rsp)
```

101.56.	60								
401a56: 401a57:	69 c6	84	24	97	00	00	00	movb	\$0x6e,0x97(%rsp)
401a5e: 401a5f:	6e c6	84	24	98	0.0	00	00	movb	\$0x64,0x98(%rsp)
401a31: 401a66:	64	04	24	90	00	00	00	MOVD	30x04,0x90(alsp)
401a67:	c6	84	24	99	00	00	00	movb	\$0x69,0x99(%rsp)
401a6e: 401a6f:	69 c6	84	24	9a	00	00	00	movb	\$0x6e,0x9a(%rsp)
401a76:	6e	0.4	0.4	01	0.0	0.0	0.0		÷0.65.001.40
401a77: 401a7e:	с6 67	84	24	9b	00	00	00	movb	\$0x67,0x9b(%rsp)
401a7f:	с6	84	24	9с	00	00	00	movb	\$0x20,0x9c(%rsp)
401a86: 401a87:	20 c6	Q /I	21	9d	0.0	00	00	movb	\$0x69,0x9d(%rsp)
401a87:	69	04	24	Эu	00	00	00	IIIOVD	70x09,0x9u(%15p)
401a8f:	с6	84	24	9е	00	00	00	movb	\$0x74,0x9e(%rsp)
401a96:	74								
401a97:	С6	84	24	9f	00	00	00	movb	\$0x20,0x9f(%rsp)
401a9e:	20	0.4	0.4	0	0.0	0.0	0.0	1	\$0.61.0.0/0.\h
401a9f: 401aa6:	с6 61	84	∠4	a0	00	00	00	movb	\$0x61,0xa0(%rsp)
401aa0: 401aa7:	c6	84	24	a1	0.0	0.0	0.0	movb	\$0x6e,0xa1(%rsp)
401aae:	6e	0 1	_ 1	αı	00	00	00	mo v D	YONOC, ONAT (OLDP)
401aaf:	с6	84	24	a2	00	00	00	movb	\$0x64,0xa2(%rsp)
401ab6:	64								•
401ab7:	С6	84	24	a3	00	00	00	movb	\$0x20,0xa3(%rsp)
401abe:	20								
401abf:	c6	84	24	a4	00	00	00	movb	\$0x73,0xa4(%rsp)
401ac6:	73	0.4	2.4	- E	0.0	00	0.0	m 0 lo	¢06£ 0
401ac7: 401ace:	c6 6f	84	∠4	a5	00	00	00	movb	\$0x6f,0xa5(%rsp)
401ace:	c6	84	24	a6	$\cap \cap$	$\cap \cap$	$\cap \cap$	movb	\$0x6c,0xa6(%rsp)
401ad6:	6c	0 1	2 1	ao	00	00	00	movb	YUNUC, UNAU (015P)
401ad7:	c6	84	24	a7	00	00	00	movb	\$0x76,0xa7(%rsp)
401ade:	76								, , , , , , , , , , , , , , , , , , , ,
401adf:	С6	84	24	a8	00	00	00	movb	\$0x69,0xa8(%rsp)
401ae6:	69								
401ae7:		84	24	a9	00	00	00	movb	\$0x6e,0xa9(%rsp)
401aee:	6e	0.4	0.4		0.0	0.0	0.0	,	^ 0 6 0 0 0
401aef:		84	24	aa	00	00	00	movb	\$0x67,0xaa(%rsp)
401af6: 401af7:	67 c6	0 Λ	2.4	ab	$\cap \cap$	$\cap \cap$	$\cap \cap$	movb	\$0x20,0xab(%rsp)
401a17. 401afe:	20	04	Z 4	aD	00	00	00	IIIOVD	70x20,0xab(%15p)
401aff:	c6	84	24	ac	0.0	0.0	0.0	movb	\$0x69,0xac(%rsp)
401b06:	69								, ,
401b07:	С6	84	24	ad	00	00	00	movb	\$0x74,0xad(%rsp)
401b0e:	74								
401b0f:	С6	84	24	ae	00	00	00	movb	\$0x20,0xae(%rsp)
401b16:	20								
401b17:	с6	84	24	af	00	00	00	movb	\$0x61,0xaf(%rsp)
401b1e: 401b1f:	61	QΛ	2.4	b0	$\cap \cap$	$\cap \cap$	$\cap \cap$	morrh	\$0x72,0xb0(%rsp)
401b11: 401b26:	72	04	۷4	υU	00	00	00	movb	70x12,0xD0 (21SD)
401b20:		84	24	b1	00	0.0	0.0	movb	\$0x65,0xb1(%rsp)
· •	- 0				- 0	- 0	- 0		, , , , , , , , , , , , , , , , , , , ,

```
401b2e:
           65
  401b2f:
           c6 84 24 b2 00 00 00
                                  movb
                                          $0x20,0xb2(%rsp)
 401b36:
           20
           c6 84 24 b3 00 00 00
                                          $0x71,0xb3(%rsp)
 401b37:
                                   movb
 401b3e:
           71
  401b3f:
           c6 84 24 b4 00 00 00
                                          $0x75,0xb4(%rsp)
                                   movb
 401b46:
           75
 401b47:
          c6 84 24 b5 00 00 00
                                   movb
                                          $0x69,0xb5(%rsp)
 401b4e:
           69
 401b4f:
           c6 84 24 b6 00 00 00
                                          $0x74,0xb6(%rsp)
                                   movb
 401b56:
           74
 401b57:
          c6 84 24 b7 00 00 00
                                          $0x65,0xb7(%rsp)
                                  movb
 401b5e:
           65
  401b5f:
           c6 84 24 b8 00 00 00
                                          $0x20,0xb8(%rsp)
                                  movb
           20
 401b66:
 401b67:
           c6 84 24 b9 00 00 00
                                          $0x64,0xb9(%rsp)
                                   movb
 401b6e:
           64
  401b6f:
           c6 84 24 ba 00 00 00
                                          $0x69,0xba(%rsp)
                                   movb
 401b76:
           69
 401b77:
           c6 84 24 bb 00 00 00
                                          $0x66,0xbb(%rsp)
                                   movb
 401b7e:
           66
 401b7f:
           c6 84 24 bc 00 00 00
                                          $0x66,0xbc(%rsp)
                                   movb
 401b86:
           66
           c6 84 24 bd 00 00 00
                                          $0x65,0xbd(%rsp)
 401b87:
                                   movb
 401b8e:
           65
  401b8f:
           c6 84 24 be 00 00 00
                                          $0x72,0xbe(%rsp)
                                   movb
 401b96:
           72
 401b97: c6 84 24 bf 00 00 00
                                          $0x65,0xbf(%rsp)
                                  movb
 401b9e:
           65
 401b9f:
          c6 84 24 c0 00 00 00
                                          $0x6e,0xc0(%rsp)
                                  movb
 401ba6:
           6e
 401ba7:
           c6 84 24 c1 00 00 00
                                  movb
                                          $0x74,0xc1(%rsp)
 401bae:
           74
 401baf:
           c6 84 24 c2 00 00 00
                                          $0x2e,0xc2(%rsp)
                                   movb
 401bb6:
           2e
 401bb7: c6 84 24 c3 00 00 00
                                          $0x2e,0xc3(%rsp)
                                  movb
 401bbe:
           2e
          c6 84 24 c4 00 00 00
                                          $0x2e,0xc4(%rsp)
 401bbf:
                                  movb
 401bc6:
           2e
           83 3d 52 2a 20 00 06
                                          $0x6,0x202a52(%rip)
 401bc7:
                                   cmpl
604620 <num input strings>
                                   jne
  401bce:
           75 34
                                          401c04 <explode bomb+0x564>
  401bd0:
           83 3d 45 2a 20 00 21
                                          $0x21,0x202a45(%rip)
                                   cmpl
60461c <last>
 401bd7:
           75 2b
                                          401c04 <explode bomb+0x564>
                                   ine
  401bd9:
          48 89 e7
                                          %rsp,%rdi
                                   mov
 401bdc:
           e8 2f ef ff ff
                                   callq
                                          400b10 <puts@plt>
 401be1:
           e8 81 fa ff ff
                                   callq
                                          401667 <phase defused>
  401be6:
           c7 05 2c 2a 20 00 00
                                          $0x0,0x202a2c(%rip)
                                  movl
60461c <last>
 401bed: 00 00 00
 401bf0: b8 00 00 00 00
                                          $0x0,%eax
                                  mov
  401bf5:
           e8 21 f6 ff ff
                                   callq 40121b <s3cret ph4se>
 401bfa:
           bf 00 00 00 00
                                  mov
                                          $0x0,%edi
```

```
401bff: e8 3c f0 ff ff
                                callq 400c40 <exit@plt>
 401c04: bf 9d 31 40 00
                                 mov
                                        $0x40319d, %edi
 401c09: e8 02 ef ff ff
                                callq 400b10 <puts@plt>
 401c0e: bf a6 31 40 00
                                       $0x4031a6, %edi
 401c13: e8 f8 ee ff ff
                                callq 400b10 <puts@plt>
 401c18: bf 00 00 00 00
                                 mov
                                        $0x0,%edi
 401c1d: e8 81 f9 ff ff
                                 callq 4015a3 <send msg>
 401c22: bf c8 30 40 00
                                mov
                                       $0x4030c8, %edi
 401c27: e8 e4 ee ff ff
                                callq 400b10 <puts@plt>
 401c2c: bf 08 00 00 00
                                 mov
                                       $0x8,%edi
 401c31: e8 0a f0 ff ff
                                 callq 400c40 <exit@plt>
0000000000401c36 <read six numbers>:
  401c36: 48 83 ec 18
                                       $0x18,%rsp
                                 sub
 401c3a: 48 89 f2
                                 mov
                                       %rsi,%rdx
 401c3d: 48 8d 4e 04
                                lea
                                      0x4(%rsi),%rcx
 401c41: 48 8d 46 14
                                lea
                                      0x14(%rsi),%rax
 401c45: 48 89 44 24 08
                               mov
                                       %rax,0x8(%rsp)
 401c4a: 48 8d 46 10
                                lea
                                     0x10(%rsi),%rax
 401c4e: 48 89 04 24
                               mov
                                     %rax,(%rsp)
 401c52: 4c 8d 4e 0c
                                     0xc(%rsi),%r9
                                lea
 401c56: 4c 8d 46 08
                                lea
                                     0x8(%rsi),%r8
 401c5a: be bd 31 40 00
                               mov
                                       $0x4031bd, %esi
 401c5f: b8 00 00 00 00
                               mov
                                       $0x0, %eax
 401c64: e8 87 ef ff ff
                                callq 400bf0 < isoc99 sscanf@plt>
 401c69: 83 f8 05
                                        $0x5, %eax
                                cmp
 401c6c: 7f 05
                                        401c73 <read six numbers+0x3d>
                                 jg
 401c6e: e8 2d fa ff ff
                                callq 4016a0 <explode bomb>
 401c73: 48 83 c4 18
                                       $0x18,%rsp
                                 add
 401c77: c3
                                 reta
0000000000401c78 <read line>:
 401c78: 48 83 ec 08
                                       $0x8,%rsp
                                 sub
 401c7c: b8 00 00 00 00
                                 mov
                                       $0x0, %eax
 401c81: e8 dc f8 ff ff
                                 callq 401562 <skip>
 401c86: 48 85 c0
                                 test
                                       %rax,%rax
  401c89: 75 6e
                                 jne
                                       401cf9 <read line+0x81>
 401c8b: 48 8b 05 76 29 20 00
                                mov
                                       0x202976(%rip),%rax
604608 <stdin@@GLIBC 2.2.5>
  401c92: 48 39 05 8f 29 20 00
                                      %rax,0x20298f(%rip)
                                 cmp
604628 <infile>
 401c99: 75 14
                                 jne
                                       401caf <read line+0x37>
 401c9b: bf cf 31 40 00
                                        $0x4031cf, %edi
                                 mov
 401ca0: e8 6b ee ff ff
                                 callq 400b10 <puts@plt>
 401ca5: bf 08 00 00 00
                                       $0x8, %edi
                                 mov
 401caa: e8 91 ef ff ff
                                 callq 400c40 <exit@plt>
 401caf: bf ed 31 40 00
                                 mov
                                       $0x4031ed, %edi
 401cb4: e8 17 ee ff ff
                                callq 400ad0 <getenv@plt>
 401cb9: 48 85 c0
                                        %rax,%rax
                                 test
 401cbc: 74 0a
                                jе
                                        401cc8 < read line + 0x50 >
 401cbe: bf 00 00 00 00
                                       $0x0, %edi
                               mov
 401cc3: e8 78 ef ff ff
                                callq 400c40 <exit@plt>
  401cc8: 48 8b 05 39 29 20 00
                                mov 0x202939(%rip),%rax
604608 <stdin@@GLIBC 2.2.5>
```

```
401ccf: 48 89 05 52 29 20 00 mov %rax,0x202952(%rip)
604628 <infile>
 401cd6: b8 00 00 00 00
                             mov $0x0,%eax
 401cdb: e8 82 f8 ff ff
                             callq 401562 <skip>
 401ce0: 48 85 c0
                              test %rax,%rax
 401ce3: 75 14
                              jne
                                     401cf9 <read line+0x81>
 401ce5: bf cf 31 40 00
                                    $0x4031cf,%edi
                             mov
 401cea: e8 21 ee ff ff
                             callq 400b10 <puts@plt>
 401cef: bf 00 00 00 00
                             mov $0x0,%edi
 401cf4: e8 47 ef ff ff
                             callq 400c40 <exit@plt>
                              mov 0x202921(%rip),%edx
 401cf9: 8b 15 21 29 20 00
604620 <num input strings>
 401cff: 48 63 c2
                              movslq %edx, %rax
 401d02: 48 8d 34 80
                               lea
                                    (%rax,%rax,4),%rsi
 401d06: 48 c1 e6 04
                              shl
                                     $0x4,%rsi
 401d0a: 48 81 c6 40 46 60 00 add $0x604640, %rsi
                                    %rsi,%rdi
 401d11: 48 89 f7
                              mov
 401d14: b8 00 00 00 00 mov
                                     $0x0,%eax
 401d19: 48 c7 c1 ff ff ff mov
                                    $0xfffffffffffffff, %rcx
 401d20: f2 ae
                             repnz scas %es:(%rdi),%al
 401d22: 48 f7 d1
                                    %rcx
                              not
 401d25: 48 83 e9 01
                             sub
                                     $0x1,%rcx
 401d29: 83 f9 4e
                             cmp $0x4e, %ecx
 401d2c: 7e 46
                             jle
                                   401d74 <read line+0xfc>
                             mov $0x4031f8,%edi
 401d2e: bf f8 31 40 00
 401d33: e8 d8 ed ff ff
                             callq 400b10 <puts@plt>
 401d38: 8b 05 e2 28 20 00
                             mov 0x2028e2(%rip),%eax
604620 <num input strings>
 401d3e: 8d 50 01
                              lea 0x1(%rax), %edx
                                   %edx,0x2028d9(%rip)
 401d41: 89 15 d9 28 20 00
                              mov
604620 <num input strings>
 401d47: 48 98
                              cltq
 401d49: 48 6b c0 50
                              imul
                                     $0x50, %rax, %rax
 401d4d: 48 bf 2a 2a 2a 74 72 movabs $0x636e7572742a2a2a, %rdi
 401d54: 75 6e 63
 401d57: 48 89 b8 40 46 60 00 mov %rdi,0x604640(%rax)
 401d5e: 48 bf 61 74 65 64 2a movabs $0x2a2a2a64657461, %rdi
 401d65: 2a 2a 00
 401d68: 48 89 b8 48 46 60 00 mov
                                    %rdi,0x604648(%rax)
 401d6f: e8 2c f9 ff ff
                              callq 4016a0 <explode bomb>
 401d74: 83 e9 01
                                     $0x1, %ecx
                              sub
 401d77: 48 63 c9
                              movslq %ecx, %rcx
 401d7a: 48 63 c2
                             movslq %edx,%rax
 401d7d: 48 8d 04 80
                              lea
                                    (%rax,%rax,4),%rax
 401d81: 48 c1 e0 04
                              shl
                                     $0x4,%rax
 401d85: c6 84 01 40 46 60 00 movb $0x0,0x604640(%rcx,%rax,1)
 401d8c: 00
 401d8d: 83 c2 01
                               add
                                    $0x1, %edx
                                    %edx,0x20288a(%rip)
 401d90: 89 15 8a 28 20 00
                               mov
604620 <num input strings>
 401d96: 48 89 f0
                             mov %rsi,%rax
 401d99: 48 83 c4 08
                             add
                                    $0x8,%rsp
 401d9d: c3
                              reta
 401d9e: 66 90
                              xchq
                                     %ax,%ax
```

```
0000000000401da0 <sigalrm handler>:
 401da0: 48 83 ec 08
                                      $0x8,%rsp
                                sub
 401da4: ba 00 00 00 00
                                mov
                                      $0x0, %edx
 401da9: be 58 33 40 00
                                     $0x403358,%esi
                               mov
  401dae: 48 8b 3d 5b 28 20 00
                                     0x20285b(%rip),%rdi
                               mov
604610 <stderr@@GLIBC 2.2.5>
 401db5: b8 00 00 00 00
                               mov
                                     $0x0,%eax
 401dba: e8 f1 ed ff ff
                               callq 400bb0 <fprintf@plt>
 401dbf: bf 01 00 00 00
                                      $0x1, %edi
                               mov
 401dc4: e8 77 ee ff ff
                               callq 400c40 <exit@plt>
0000000000401dc9 <rio readlineb>:
  401dc9: 41 57
                                      %r15
                                push
 401dcb: 41 56
                                     %r14
                                push
                                push %r13
 401dcd: 41 55
 401dcf: 41 54
                                     %r12
                                push
 401dd1: 55
                               push
                                      %rbp
 401dd2: 53
                              push %rbx
 401dd3: 48 83 ec 38
                               sub
                                    $0x38,%rsp
 401dd7: 49 89 f6
                                      %rsi,%r14
                               mov
 401dda: 48 89 54 24 18
                                     %rdx,0x18(%rsp)
                              mov
 401ddf: 48 83 fa 01
                              cmp
                                    $0x1,%rdx
 401de3: 0f 86 c2 00 00 00
                              jbe
                                    401eab <rio readlineb+0xe2>
                                    %rdi,%rbx
 401de9: 48 89 fb
                               mov
 401dec: 41 bd 01 00 00 00
                                    $0x1,%r13d
                               mov
 401df2: 4c 8d 67 10
                               lea 0x10(%rdi),%r12
 401df6: eb 2e
                                    401e26 <rio readlineb+0x5d>
                                jmp
 401df8: ba 00 20 00 00
                                     $0x2000,%edx
                                mov
 401dfd: 4c 89 e6
                                     %r12,%rsi
                               mov
 401e00: 8b 3b
                                     (%rbx),%edi
                              mov
 401e02: e8 59 ed ff ff
                              callq 400b60 <read@plt>
 401e07: 89 43 04
                                      %eax, 0x4(%rbx)
                               mov
 401e0a: 85 c0
                               test
                                      %eax, %eax
 401e0c: 79 Of
                               jns
                                      401eld <rio readlineb+0x54>
 401e0e: e8 dd ec ff ff
                               callq 400af0 < errno location@plt>
 401e13: 83 38 04
                                      $0x4, (%rax)
                                cmpl
 401e16: 74 0e
                                jе
                                      401e26 <rio readlineb+0x5d>
 401e18: e9 9d 00 00 00
                                      401eba <rio readlineb+0xf1>
                               jmpq
 401e1d: 85 c0
                               test
                                      %eax, %eax
 401e1f: 90
                               nop
 401e20: 74 6c
                               jе
                                      401e8e <rio readlineb+0xc5>
 401e22: 4c 89 63 08
                                      %r12,0x8(%rbx)
                              mov
 401e26: 8b 6b 04
                              mov
                                     0x4(%rbx),%ebp
 401e29: 85 ed
                               test %ebp, %ebp
 401e2b:
         7e cb
                               jle
                                      401df8 <rio readlineb+0x2f>
 401e2d: 85 ed
                                      %ebp,%ebp
                               test
 401e2f: 41 0f 95 c7
                              setne %r15b
 401e33: 41 Of b6 c7
                              movzbl %r15b,%eax
 401e37: 89 44 24 0c
                              mov
                                    %eax,0xc(%rsp)
 401e3b: 45 Of b6 ff
                              movzbl %r15b,%r15d
 401e3f: 48 8b 4b 08
                              mov
                                     0x8(%rbx),%rcx
  401e43: 4c 89 fa
                               mov
                                      %r15,%rdx
 401e46: 48 89 4c 24 10
                               mov
                                      %rcx, 0x10(%rsp)
```

```
401e4b: 48 89 ce
                               mov
                                      %rcx,%rsi
 401e4e: 48 8d 7c 24 2f
                               lea
                                      0x2f(%rsp),%rdi
 401e53: e8 78 ed ff ff
                              callq 400bd0 <memcpy@plt>
 401e58: 4c 03 7c 24 10
                              add 0x10(\$rsp), \$r15
 401e5d: 4c 89 7b 08
                              mov
                                     %r15,0x8(%rbx)
 401e61: 8b 44 24 0c
                               mov
                                      0xc(%rsp),%eax
 401e65: 29 c5
                              sub
                                     %eax,%ebp
 401e67: 89 6b 04
                              mov
                                    %ebp,0x4(%rbx)
 401e6a: 83 f8 01
                                    $0x1,%eax
                              cmp
                                   401e82 <rio_readlineb+0xb9> $0x1,%r14
 401e6d: 75 13
                              jne
 401e6f: 49 83 c6 01
                              add
                                      $0x1,%r14
 401e73: Of b6 44 24 2f
                              movzbl 0x2f(%rsp),%eax
 401e78: 41 88 46 ff
                              mov %al,-0x1(%r14)
 401e7c: 3c 0a
                               cmp
                                      $0xa,%al
 401e7e: 75 18
                                      401e98 <rio_readlineb+0xcf>
                               jne
 401e80: eb 2f
                               jmp 401eb1 <rio readlineb+0xe8>
                             cmpl $0x0,0xc(%rsp)
 401e82: 83 7c 24 0c 00
 401e87: 75 3a
                               jne
                                      401ec3 <rio_readlineb+0xfa>
 401e89: 44 89 e8
                              mov
                                     %r13d,%eax
 401e8c: eb 03
                                    401e91 <rio readlineb+0xc8>
                               jmp
 401e8e: 44 89 e8
                                      %r13d,%eax
                               mov
 401e91: 83 f8 01
                               cmp
                                      $0x1, %eax
 401e94: 75 1b
                               jne
                                      401eb1 <rio readlineb+0xe8>
 401e96: eb 34
                                     401ecc <rio readlineb+0x103>
                               jmp
                                    $0x1,%r13d
 401e98: 41 83 c5 01
                               add
 401e9c: 49 63 c5
                               movslq %r13d, %rax
 401e9f: 48 3b 44 24 18
                               cmp 0x18(%rsp),%rax
 401ea4: 73 0b
                                    401eb1 <rio readlineb+0xe8>
                                jae
 401ea6: e9 7b ff ff ff
                                jmpq 401e26 <rio readlineb+0x5d>
 401eab: 41 bd 01 00 00 00
                                      $0x1,%r13d
                                mov
 401eb1: 41 c6 06 00
                                movb $0x0, (%r14)
 401eb5: 49 63 c5
                                movslq %r13d, %rax
 401eb8: eb 17
                                      401ed1 <rio readlineb+0x108>
                                jmp
 401eba: 48 c7 c0 ff ff ff
                                      $0xfffffffffffffff, %rax
                               mov
 401ec1: eb 0e
                                jmp 401ed1 <rio readlineb+0x108>
 401ec3: 48 c7 c0 ff ff ff
                                    $0xfffffffffffffffff,%rax
                               mov
 401eca: eb 05
                                jmp
                                      401ed1 <rio readlineb+0x108>
 401ecc: b8 00 00 00 00
                               mov
                                     $0x0,%eax
 401ed1: 48 83 c4 38
                                     $0x38,%rsp
                               add
 401ed5: 5b
                                     %rbx
                               pop
 401ed6: 5d
                                     %rbp
                               pop
 401ed7: 41 5c
                              pop
                                      %r12
 401ed9: 41 5d
                                      %r13
                              pop
 401edb: 41 5e
                               pop
                                      %r14
 401edd: 41 5f
                               pop
                                      %r15
 401edf: c3
                               retq
0000000000401ee0 <submitr>:
 401ee0: 41 57
                                      %r15
                               push
 401ee2: 41 56
                                     %r14
                              push
 401ee4: 41 55
                              push %r13
                               push %r12
 401ee6: 41 54
  401ee8: 55
                               push
                                      %rbp
 401ee9:
          53
                               push
                                      %rbx
```

```
401eea: 48 81 ec 68 a0 00 00
                                sub
                                       $0xa068,%rsp
401ef1: 48 89 fd
                                      %rdi,%rbp
                                mov
401ef4: 41 89 f5
                                      %esi,%r13d
                               mov
401ef7: 48 89 54 24 08
                               mov
                                      %rdx, 0x8 (%rsp)
401efc: 48 89 4c 24 10
                                       %rcx, 0x10 (%rsp)
                               mov
401f01: 4c 89 44 24 18
                                      %r8,0x18(%rsp)
                               mov
401f06: 4d 89 cf
                                      %r9,%r15
                               mov
401f09: 48 8b 9c 24 a0 a0 00
                                      0xa0a0(%rsp),%rbx
                               mov
401f10: 00
401f11: 4c 8b b4 24 a8 a0 00
                                      0xa0a8(%rsp),%r14
                               mov
401f18: 00
401f19: c7 84 24 3c 20 00 00
                               movl
                                      $0x0,0x203c(%rsp)
401f20: 00 00 00 00
401f24: ba 00 00 00 00
                                      $0x0, %edx
                               mov
401f29: be 01 00 00 00
                               mov
                                      $0x1,%esi
401f2e: bf 02 00 00 00
                                      $0x2, %edi
                               mov
401f33: e8 48 ed ff ff
                               callq 400c80 <socket@plt>
401f38: 41 89 c4
                                       %eax, %r12d
                               mov
401f3b: 85 c0
                               test
                                      %eax, %eax
401f3d: 79 50
                                      401f8f <submitr+0xaf>
                                jns
401f3f: 48 b8 45 72 72 6f 72
                               movabs $0x43203a726f727245, %rax
401f46:
        3a 20 43
401f49: 49 89 06
                               mov
                                      %rax, (%r14)
401f4c: 48 b8 6c 69 65 6e 74
                               movabs $0x6e7520746e65696c, %rax
401f53: 20 75 6e
401f56: 49 89 46 08
                               mov
                                      %rax,0x8(%r14)
401f5a: 48 b8 61 62 6c 65 20
                               movabs $0x206f7420656c6261, %rax
401f61: 74 6f 20
401f64: 49 89 46 10
                               mov
                                      %rax,0x10(%r14)
401f68: 48 b8 63 72 65 61 74
                               movabs $0x7320657461657263, %rax
401f6f: 65 20 73
401f72: 49 89 46 18
                               mov
                                       %rax, 0x18 (%r14)
401f76: 41 c7 46 20 6f 63 6b
                                      $0x656b636f,0x20(%r14)
                               movl
401f7d:
         6.5
401f7e: 66 41 c7 46 24 74 00
                               movw
                                      $0x74,0x24(%r14)
401f85: b8 ff ff ff
                                      $0xffffffff, %eax
                               mov
401f8a: e9 f9 06 00 00
                                      402688 <submitr+0x7a8>
                                jmpq
401f8f: 48 89 ef
                               mov
                                      %rbp,%rdi
401f92: e8 09 ec ff ff
                                callq 400ba0 <gethostbyname@plt>
401f97: 48 85 c0
                                      %rax,%rax
                               test
401f9a: 75 6b
                                       402007 <submitr+0x127>
                                jne
401f9c: 48 b8 45 72 72 6f 72
                               movabs $0x44203a726f727245, %rax
401fa3: 3a 20 44
401fa6: 49 89 06
                               mov
                                      %rax, (%r14)
401fa9: 48 b8 4e 53 20 69 73
                               movabs $0x6e7520736920534e, %rax
        20 75 6e
401fb0:
        49 89 46 08
401fb3:
                               mov
                                      %rax,0x8(%r14)
401fb7: 48 b8 61 62 6c 65 20
                               movabs $0x206f7420656c6261, %rax
401fbe: 74 6f 20
401fc1: 49 89 46 10
                               mov
                                       %rax,0x10(%r14)
401fc5: 48 b8 72 65 73 6f 6c
                               movabs $0x2065766c6f736572, %rax
401fcc: 76 65 20
401fcf: 49 89 46 18
                               mov
                                       %rax, 0x18 (%r14)
401fd3:
        48 b8 73 65 72 76 65
                               movabs $0x6120726576726573, %rax
```

```
401fda: 72 20 61
401fdd: 49 89 46 20
                                mov
                                       %rax,0x20(%r14)
401fel: 41 c7 46 28 64 64 72
                                       $0x65726464,0x28(%r14)
                                movl
401fe8: 65
401fe9: 66 41 c7 46 2c 73 73
                                       $0x7373,0x2c(%r14)
                                movw
401ff0: 41 c6 46 2e 00
                                movb
                                       $0x0,0x2e(%r14)
401ff5:
        44 89 e7
                                mov
                                       %r12d,%edi
401ff8: e8 53 eb ff ff
                                callq 400b50 <close@plt>
401ffd: b8 ff ff ff
                                       $0xffffffff, %eax
                                mov
402002: e9 81 06 00 00
                                       402688 <submitr+0x7a8>
                                jmpq
402007: 48 c7 84 24 50 a0 00
                                       $0x0,0xa050(%rsp)
                                movq
40200e: 00 00 00 00 00
402013: 48 c7 84 24 58 a0 00
                                       $0x0,0xa058(%rsp)
                                movq
40201a:
        00 00 00 00 00
40201f: 66 c7 84 24 50 a0 00
                                       $0x2,0xa050(%rsp)
                                movw
402026: 00 02 00
402029: 48 63 50 14
                                movslq 0x14(%rax),%rdx
40202d: 48 8d b4 24 54 a0 00
                                lea
                                       0xa054(%rsp),%rsi
402034: 00
402035: 48 8b 40 18
                                       0x18(%rax),%rax
                                mov
402039: 48 8b 38
                                       (%rax),%rdi
                                mov
40203c:
        e8 bf eb ff ff
                                callq 400c00 <bcopy@plt>
402041: 66 41 c1 cd 08
                                ror
                                       $0x8,%r13w
402046: 66 44 89 ac 24 52 a0
                                mov
                                       %r13w,0xa052(%rsp)
40204d: 00 00
40204f: ba 10 00 00 00
                                mov
                                       $0x10, %edx
402054: 48 8d b4 24 50 a0 00
                                       0xa050(%rsp),%rsi
                                lea
40205b: 00
40205c: 44 89 e7
                                mov
                                       %r12d, %edi
40205f:
        e8 ec eb ff ff
                                callq 400c50 <connect@plt>
402064: 85 c0
                                test
                                       %eax, %eax
402066: 79 5d
                                       4020c5 <submitr+0x1e5>
                                jns
402068: 48 b8 45 72 72 6f 72
                                movabs $0x55203a726f727245, %rax
         3a 20 55
40206f:
402072: 49 89 06
                                mov
                                       %rax, (%r14)
402075: 48 b8 6e 61 62 6c 65
                                movabs $0x6f7420656c62616e, %rax
40207c: 20 74 6f
40207f:
        49 89 46 08
                                mov
                                       %rax, 0x8 (%r14)
402083: 48 b8 20 63 6f 6e 6e
                                movabs $0x7463656e6e6f6320, %rax
40208a: 65 63 74
40208d: 49 89 46 10
                                mov
                                       %rax, 0x10 (%r14)
402091: 48 b8 20 74 6f 20 74
                                movabs $0x20656874206f7420, %rax
402098: 68 65 20
40209b: 49 89 46 18
                                mov
                                       %rax, 0x18 (%r14)
        41 c7 46 20 73 65 72
40209f:
                                       $0x76726573,0x20(%r14)
                                movl
4020a6:
         76
        66 41 c7 46 24 65 72
                                       $0x7265,0x24(%r14)
4020a7:
                                movw
4020ae: 41 c6 46 26 00
                                movb
                                       $0x0,0x26(%r14)
4020b3: 44 89 e7
                                       %r12d,%edi
                                mov
4020b6: e8 95 ea ff ff
                                callq 400b50 <close@plt>
4020bb: b8 ff ff ff
                                       $0xffffffff, %eax
                                mov
4020c0: e9 c3 05 00 00
                                       402688 <submitr+0x7a8>
                                jmpq
        48 c7 c2 ff ff ff ff
4020c5:
                                mov
                                       $0xffffffffffffffff, %rdx
4020cc:
         48 89 df
                                mov
                                       %rbx,%rdi
```

```
4020cf: b8 00 00 00 00
                                     $0x0,%eax
                             mov
                                   %rdx,%rcx
4020d4: 48 89 d1
                              mov
4020d7: f2 ae
                             repnz scas %es:(%rdi),%al
4020d9: 48 f7 d1
                             not
                                    %rcx
4020dc: 48 89 ce
                             mov
                                     %rcx,%rsi
4020df: 48 8b 7c 24 08
                             mov
                                     0x8(%rsp),%rdi
4020e4: 48 89 d1
                             mov
                                     %rdx,%rcx
4020e7: f2 ae
                             repnz scas %es:(%rdi),%al
4020e9: 49 89 c8
                             mov
                                    %rcx,%r8
4020ec: 48 8b 7c 24 10
                            mov
                                     0x10(%rsp),%rdi
4020f1: 48 89 d1
                             mov
                                    %rdx,%rcx
4020f4: f2 ae
                             repnz scas %es:(%rdi),%al
4020f6: 48 f7 d1
                             not
                                     %rcx
4020f9: 49 89 c9
                             mov
                                    %rcx,%r9
4020fc: 4c 89 ff
                             mov
                                    %r15,%rdi
                                  %rdx,%rcx
4020ff: 48 89 d1
                             mov
402102: f2 ae
                             repnz scas %es:(%rdi),%al
402104: 4d 29 c1
                             sub
                                   %r8,%r9
402107: 49 29 c9
                             sub
                                     %rcx,%r9
40210a: 48 8d 44 76 fd
                             lea
                                     -0x3(%rsi,%rsi,2),%rax
40210f: 49 8d 44 01 7b
                                    0x7b(%r9,%rax,1),%rax
                              lea
402114: 48 3d 00 20 00 00
                              cmp
                                   $0x2000,%rax
                                  40218f <submitr+0x2af>
40211a: 76 73
                              jbe
40211c: 48 b8 45 72 72 6f 72 movabs $0x52203a726f727245, %rax
402123: 3a 20 52
402126: 49 89 06
                              mov
                                    %rax, (%r14)
402129: 48 b8 65 73 75 6c 74
                              movabs $0x747320746c757365, %rax
402130: 20 73 74
402133: 49 89 46 08
                              mov
                                     %rax,0x8(%r14)
402137: 48 b8 72 69 6e 67 20
                              movabs $0x6f6f7420676e6972, %rax
40213e: 74 6f 6f
402141: 49 89 46 10
                              mov
                                     %rax, 0x10 (%r14)
402145: 48 b8 20 6c 61 72 67
                              movabs $0x202e656772616c20, %rax
40214c: 65 2e 20
40214f: 49 89 46 18
                              mov
                                     %rax,0x18(%r14)
402153: 48 b8 49 6e 63 72 65
                              movabs $0x6573616572636e49, %rax
40215a: 61 73 65
40215d: 49 89 46 20
                              mov
                                    %rax,0x20(%r14)
402161: 48 b8 20 53 55 42 4d movabs $0x5254494d42555320, %rax
402168: 49 54 52
40216b: 49 89 46 28
                              mov
                                     %rax, 0x28 (%r14)
40216f: 48 b8 5f 4d 41 58 42
                              movabs $0x46554258414d5f, %rax
402176: 55 46 00
402179: 49 89 46 30
                                     %rax,0x30(%r14)
                              mov
40217d: 44 89 e7
                                     %r12d,%edi
                              mov
402180: e8 cb e9 ff ff
                              callq 400b50 <close@plt>
402185: b8 ff ff ff
                              mov
                                     $0xfffffffff, %eax
40218a: e9 f9 04 00 00
                              jmpq
                                     402688 <submitr+0x7a8>
40218f: 48 8d 94 24 40 40 00
                                    0x4040(%rsp),%rdx
                              lea
402196: 00
402197: b9 00 04 00 00
                                     $0x400, %ecx
                              mov
40219c: b8 00 00 00 00
                              mov
                                     $0x0, %eax
4021a1: 48 89 d7
                              mov
                                     %rdx,%rdi
4021a4: f3 48 ab
                              rep stos %rax, %es: (%rdi)
```

```
4021a7: 48 89 df
                                mov
                                      %rbx,%rdi
4021aa: 48 c7 c1 ff ff ff
                                mov
                                       $0xfffffffffffffff,%rcx
4021b1: f2 ae
                                repnz scas %es:(%rdi),%al
4021b3: 48 f7 d1
                                not
                                      %rcx
4021b6: 48 83 e9 01
                                sub
                                       $0x1,%rcx
       85 c9
4021ba:
                                test
                                       %ecx, %ecx
4021bc: 0f 84 d3 03 00 00
                                       402595 <submitr+0x6b5>
                                jе
4021c2: 8d 41 ff
                                      -0x1(%rcx), %eax
                                lea
4021c5: 4c 8d 6c 03 01
                                lea
                                       0x1(%rbx,%rax,1),%r13
4021ca: 48 89 d5
                                mov
                                       %rdx,%rbp
4021cd: 0f b6 13
                               movzbl (%rbx), %edx
4021d0: 80 fa 2a
                                      $0x2a,%dl
                                cmp
4021d3: 74 1f
                                       4021f4 <submitr+0x314>
                                jе
4021d5: 8d 42 d3
                                lea
                                      -0x2d(%rdx), %eax
4021d8: 3c 01
                                      $0x1,%al
                                cmp
4021da: 76 18
                                ibe
                                      4021f4 <submitr+0x314>
4021dc: 80 fa 5f
                                cmp
                                      $0x5f,%dl
4021df:
        74 13
                                      4021f4 <submitr+0x314>
                                jе
4021e1: 8d 42 d0
                                lea
                                      -0x30(%rdx),%eax
4021e4: 3c 09
                                cmp
                                      $0x9,%al
4021e6: 76 0c
                                       4021f4 <submitr+0x314>
                                jbe
4021e8: 89 d0
                                       %edx, %eax
                               mov
4021ea: 83 e0 df
                                and
                                      $0xffffffdf, %eax
4021ed: 83 e8 41
                                sub
                                      $0x41, %eax
4021f0: 3c 19
                                cmp
                                      $0x19,%al
       77 09
4021f2:
                                      4021fd <submitr+0x31d>
                                jа
4021f4: 48 8d 45 01
                                      0x1(%rbp),%rax
                               lea
4021f8: 88 55 00
                                      %dl,0x0(%rbp)
                               mov
4021fb: eb 52
                                jmp
                                      40224f <submitr+0x36f>
       80 fa 20
4021fd:
                                       $0x20,%dl
                                cmp
402200: 75 0a
                               jne
                                      40220c <submitr+0x32c>
402202: 48 8d 45 01
                               lea
                                      0x1(%rbp),%rax
402206: c6 45 00 2b
                                      $0x2b,0x0(%rbp)
                               movb
40220a: eb 43
                                      40224f <submitr+0x36f>
                                jmp
40220c: 8d 42 e0
                                      -0x20(%rdx),%eax
                                lea
40220f: 3c 5f
                                cmp
                                      $0x5f,%al
402211: 76 09
                                jbe
                                      40221c <submitr+0x33c>
402213: 80 fa 09
                                      $0x9,%dl
                                cmp
402216: Of 85 e4 03 00 00
                                       402600 <submitr+0x720>
                                ine
                               movzbl %dl,%edx
40221c: 0f b6 d2
40221f: be 30 34 40 00
                               mov
                                       $0x403430, %esi
402224: 48 8d 7c 24 20
                                lea
                                       0x20(%rsp),%rdi
402229: b8 00 00 00 00
                                      $0x0, %eax
                                mov
40222e: e8 fd e9 ff ff
                                callq 400c30 <sprintf@plt>
                                movzbl 0x20(%rsp),%eax
402233: Of b6 44 24 20
402238: 88 45 00
                                mov
                                       %al, 0x0 (%rbp)
40223b: Of b6 44 24 21
                                movzbl 0x21(%rsp), %eax
402240: 88 45 01
                               mov
                                       %al, 0x1(%rbp)
402243: 48 8d 45 03
                                       0x3(%rbp),%rax
                                lea
402247: Of b6 54 24 22
                               movzbl 0x22(%rsp),%edx
40224c: 88 55 02
                               mov
                                    %dl,0x2(%rbp)
40224f: 48 83 c3 01
                                add
                                       $0x1, %rbx
402253:
       4c 39 eb
                                cmp
                                      %r13,%rbx
402256:
       Of 84 39 03 00 00
                                jе
                                      402595 <submitr+0x6b5>
```

```
40225c: 48 89 c5
                               mov
                                    %rax,%rbp
40225f: e9 69 ff ff ff
                                      4021cd <submitr+0x2ed>
                               jmpq
402264: 48 89 da
                                      %rbx,%rdx
                               mov
402267: 48 89 ee
                               mov
                                      %rbp,%rsi
40226a: 44 89 e7
                                     %r12d,%edi
                              mov
                              callq 400b20 <write@plt>
40226d: e8 ae e8 ff ff
402272: 48 85 c0
                              test
                                      %rax,%rax
402275: 7f 10
                                      402287 <submitr+0x3a7>
                              jq
402277: e8 74 e8 ff ff
                             callq 400af0 < errno location@plt>
40227c: 83 38 04
                              cmpl
                                     $0x4, (%rax)
40227f: 90
                              nop
                                      402294 <submitr+0x3b4>
402280: 75 12
                               jne
402282: b8 00 00 00 00
                               mov
                                      $0x0, %eax
402287: 48 01 c5
                               add
                                     %rax,%rbp
40228a: 48 29 c3
                                    %rax,%rbx
                               sub
40228d: 75 d5
                                    402264 <submitr+0x384>
                               ine
40228f: 4d 85 ed
                               test %r13,%r13
402292: 79 5f
                                      4022f3 <submitr+0x413>
                               jns
402294: 48 b8 45 72 72 6f 72 movabs $0x43203a726f727245,%rax
40229b: 3a 20 43
40229e: 49 89 06
                                    %rax, (%r14)
                               mov
4022a1: 48 b8 6c 69 65 6e 74
                               movabs $0x6e7520746e65696c, %rax
4022a8: 20 75 6e
4022ab: 49 89 46 08
                               mov
                                      %rax, 0x8 (%r14)
4022af: 48 b8 61 62 6c 65 20
                               movabs $0x206f7420656c6261, %rax
4022b6: 74 6f 20
4022b9: 49 89 46 10
                                      %rax,0x10(%r14)
                               mov
4022bd: 48 b8 77 72 69 74 65
                              movabs $0x6f74206574697277, %rax
4022c4: 20 74 6f
4022c7: 49 89 46 18
                                      %rax,0x18(%r14)
                               mov
4022cb: 48 b8 20 74 68 65 20
                               movabs $0x7265732065687420, %rax
4022d2: 73 65 72
4022d5: 49 89 46 20
                               mov
                                      %rax,0x20(%r14)
4022d9: 41 c7 46 28 76 65 72
                                      $0x726576,0x28(%r14)
                               movl
4022e0: 00
4022e1: 44 89 e7
                                      %r12d,%edi
                               mov
4022e4: e8 67 e8 ff ff
                               callq 400b50 <close@plt>
4022e9: b8 ff ff ff
                               mov
                                      $0xffffffff, %eax
4022ee: e9 95 03 00 00
                                     402688 <submitr+0x7a8>
                               jmpq
4022f3: 44 89 a4 24 40 80 00
                                     %r12d,0x8040(%rsp)
                               mov
4022fa: 00
4022fb: c7 84 24 44 80 00 00
                               movl
                                     $0x0,0x8044(%rsp)
402302: 00 00 00 00
402306: 48 8d 84 24 50 80 00
                                     0x8050(%rsp),%rax
                               lea
40230d: 00
       48 89 84 24 48 80 00
40230e:
                                      %rax, 0x8048 (%rsp)
                               mov
       00
402315:
402316: ba 00 20 00 00
                               mov
                                      $0x2000, %edx
40231b: 48 8d b4 24 40 60 00
                                      0x6040(%rsp),%rsi
                               lea
402322:
402323: 48 8d bc 24 40 80 00
                                      0x8040(%rsp),%rdi
                               lea
40232a: 00
40232b: e8 99 fa ff ff
                               callq 401dc9 <rio readlineb>
402330: 48 85 c0
                               test
                                      %rax,%rax
```

```
402333: 7f 74
                                    4023a9 <submitr+0x4c9>
                               jg
402335: 48 b8 45 72 72 6f 72
                               movabs $0x43203a726f727245, %rax
40233c: 3a 20 43
40233f: 49 89 06
                               mov
                                      %rax, (%r14)
402342: 48 b8 6c 69 65 6e 74
                               movabs $0x6e7520746e65696c, %rax
402349: 20 75 6e
40234c: 49 89 46 08
                               mov
                                      %rax,0x8(%r14)
402350: 48 b8 61 62 6c 65 20
                               movabs $0x206f7420656c6261, %rax
402357: 74 6f 20
40235a: 49 89 46 10
                               mov
                                      %rax,0x10(%r14)
40235e: 48 b8 72 65 61 64 20
                               movabs $0x7269662064616572, %rax
402365: 66 69 72
402368: 49 89 46 18
                               mov
                                      %rax, 0x18 (%r14)
40236c: 48 b8 73 74 20 68 65
                               movabs $0x6564616568207473, %rax
402373: 61 64 65
402376: 49 89 46 20
                               mov
                                      %rax,0x20(%r14)
40237a: 48 b8 72 20 66 72 6f
                               movabs $0x73206d6f72662072, %rax
402381:
        6d 20 73
402384: 49 89 46 28
                               mov
                                      %rax,0x28(%r14)
402388: 41 c7 46 30 65 72 76
                               movl $0x65767265,0x30(%r14)
40238f: 65
402390: 66 41 c7 46 34 72 00
                               movw
                                      $0x72,0x34(%r14)
402397: 44 89 e7
                               mov
                                      %r12d,%edi
40239a: e8 b1 e7 ff ff
                               callq 400b50 <close@plt>
40239f: b8 ff ff ff
                               mov
                                      $0xffffffff, %eax
4023a4: e9 df 02 00 00
                                      402688 <submitr+0x7a8>
                               jmpq
4023a9: 4c 8d 44 24 30
                                      0x30(%rsp),%r8
                               lea
                                    0x203c(%rsp),%rcx
4023ae: 48 8d 8c 24 3c 20 00 lea
4023b5: 00
4023b6: 48 8d 94 24 40 20 00
                                     0x2040(%rsp),%rdx
                               lea
4023bd: 00
4023be: be 37 34 40 00
                                      $0x403437, %esi
                               mov
4023c3: 48 8d bc 24 40 60 00
                               lea
                                     0x6040(%rsp),%rdi
4023ca: 00
4023cb: b8 00 00 00 00
                               mov
                                      $0x0, %eax
4023d0: e8 1b e8 ff ff
                               callq 400bf0 < isoc99 sscanf@plt>
4023d5: 8b 94 24 3c 20 00 00
                               mov
                                      0x203c(%rsp),%edx
4023dc: 81 fa c8 00 00 00
                               cmp
                                      $0xc8, %edx
4023e2: Of 84 b2 00 00 00
                               iе
                                      40249a <submitr+0x5ba>
4023e8: 48 8d 4c 24 30
                                     0x30(%rsp),%rcx
                               lea
4023ed: be 80 33 40 00
                               mov
                                     $0x403380,%esi
4023f2: 4c 89 f7
                               mov
                                      %r14,%rdi
4023f5: b8 00 00 00 00
                                      $0x0, %eax
                               mov
4023fa: e8 31 e8 ff ff
                               callq 400c30 <sprintf@plt>
4023ff: 44 89 e7
                                      %r12d,%edi
                               mov
402402: e8 49 e7 ff ff
                               callq 400b50 <close@plt>
402407: b8 ff ff ff
                               mov
                                      $0xfffffffff, %eax
40240c: e9 77 02 00 00
                               jmpq
                                      402688 <submitr+0x7a8>
402411: ba 00 20 00 00
                                      $0x2000, %edx
                               mov
402416: 48 8d b4 24 40 60 00
                               lea
                                      0x6040(%rsp),%rsi
40241d: 00
40241e: 48 8d bc 24 40 80 00
                               lea
                                     0x8040(%rsp),%rdi
402425: 00
402426: e8 9e f9 ff ff
                               callq 401dc9 <rio readlineb>
```

```
40242b: 48 85 c0
                               test %rax,%rax
40242e: 7f 6a
                               jq
                                      40249a <submitr+0x5ba>
402430: 48 b8 45 72 72 6f 72 movabs $0x43203a726f727245,%rax
402437: 3a 20 43
40243a: 49 89 06
                                     %rax, (%r14)
                               mov
40243d: 48 b8 6c 69 65 6e 74
                               movabs $0x6e7520746e65696c, %rax
402444: 20 75 6e
402447: 49 89 46 08
                               mov
                                      %rax, 0x8 (%r14)
40244b: 48 b8 61 62 6c 65 20
                               movabs $0x206f7420656c6261, %rax
402452: 74 6f 20
402455: 49 89 46 10
                                      %rax,0x10(%r14)
                               mov
402459: 48 b8 72 65 61 64 20
                             movabs $0x6165682064616572,%rax
402460: 68 65 61
402463: 49 89 46 18
                                      %rax,0x18(%r14)
                               mov
402467: 48 b8 64 65 72 73 20
                               movabs $0x6f72662073726564, %rax
40246e: 66 72 6f
402471: 49 89 46 20
                               mov
                                      %rax, 0x20 (%r14)
402475: 48 b8 6d 20 73 65 72
                               movabs $0x726576726573206d, %rax
40247c: 76 65 72
40247f: 49 89 46 28
                                      %rax, 0x28 (%r14)
                               mov
402483: 41 c6 46 30 00
                                      $0x0,0x30(%r14)
                               movb
402488: 44 89 e7
                                      %r12d,%edi
                               mov
40248b: e8 c0 e6 ff ff
                               callq 400b50 <close@plt>
402490: b8 ff ff ff
                                      $0xfffffffff,%eax
                               mov
402495: e9 ee 01 00 00
                               jmpq
                                      402688 <submitr+0x7a8>
40249a: 80 bc 24 40 60 00 00
                               cmpb $0xd, 0x6040 (%rsp)
4024a1: 0d
4024a2: Of 85 69 ff ff ff
                                      402411 <submitr+0x531>
                               jne
4024a8: 80 bc 24 41 60 00 00
                               cmpb
                                      $0xa,0x6041(%rsp)
4024af: 0a
4024b0: Of 85 5b ff ff ff
                               jne
                                      402411 <submitr+0x531>
4024b6: 80 bc 24 42 60 00 00
                                     $0x0,0x6042(%rsp)
                               cmpb
4024bd: 00
4024be: Of 85 4d ff ff ff
                                      402411 <submitr+0x531>
                               jne
4024c4: ba 00 20 00 00
                               mov
                                      $0x2000, %edx
4024c9: 48 8d b4 24 40 60 00
                               lea
                                      0x6040(%rsp),%rsi
4024d0: 00
4024d1: 48 8d bc 24 40 80 00
                                      0x8040(%rsp),%rdi
                               lea
4024d8: 00
4024d9: e8 eb f8 ff ff
                               callq 401dc9 <rio readlineb>
4024de: 48 85 c0
                               test
                                      %rax,%rax
4024e1: 7f 73
                               jg
                                      402556 <submitr+0x676>
4024e3: 48 b8 45 72 72 6f 72
                               movabs $0x43203a726f727245, %rax
4024ea: 3a 20 43
4024ed: 49 89 06
                                      %rax,(%r14)
                               mov
4024f0: 48 b8 6c 69 65 6e 74
                               movabs $0x6e7520746e65696c, %rax
4024f7: 20 75 6e
4024fa: 49 89 46 08
                               mov
                                      %rax, 0x8 (%r14)
4024fe: 48 b8 61 62 6c 65 20
                               movabs $0x206f7420656c6261, %rax
402505: 74 6f 20
402508: 49 89 46 10
                                      %rax,0x10(%r14)
                               mov
40250c: 48 b8 72 65 61 64 20
                               movabs $0x6174732064616572, %rax
       73 74 61
402513:
402516:
       49 89 46 18
                               mov
                                      %rax, 0x18 (%r14)
```

```
40251a: 48 b8 74 75 73 20 6d movabs $0x7373656d20737574, %rax
402521: 65 73 73
402524: 49 89 46 20
                                    %rax,0x20(%r14)
                             mov
402528: 48 b8 61 67 65 20 66 movabs $0x6d6f726620656761,%rax
40252f: 72 6f 6d
402532: 49 89 46 28
                              mov
                                   %rax,0x28(%r14)
402536: 48 b8 20 73 65 72 76
                              movabs $0x72657672657320,%rax
40253d: 65 72 00
402540: 49 89 46 30
                              mov
                                    %rax, 0x30 (%r14)
402544: 44 89 e7
                              mov
                                    %r12d, %edi
402547: e8 04 e6 ff ff
                             callq 400b50 <close@plt>
40254c: b8 ff ff ff
                            mov $0xfffffffff, %eax
402551: e9 32 01 00 00
                              jmpq 402688 <submitr+0x7a8>
402556: 48 8d b4 24 40 60 00
                                    0x6040(%rsp),%rsi
                              lea
40255d: 00
40255e: 4c 89 f7
                                   %r14,%rdi
                              mov
402561: e8 9a e5 ff ff
                             callq 400b00 <strcpy@plt>
402566: 44 89 e7
                                    %r12d,%edi
                             mov
402569: e8 e2 e5 ff ff
                            callq 400b50 <close@plt>
40256e: 41 0f b6 06
                             movzbl (%r14),%eax
402572: 83 e8 4f
                                    $0x4f, %eax
                             sub
                             jne
402575: 75 Of
                                    402586 <submitr+0x6a6>
402577: 41 Of b6 46 01
                            movzbl 0x1(%r14), %eax
40257c: 83 e8 4b
                             sub
                                   $0x4b,%eax
40257f: 75 05
                             jne
                                    402586 <submitr+0x6a6>
402581: 41 Of b6 46 02
                            movzbl 0x2(%r14),%eax
402586: 85 c0
                             test %eax, %eax
402588: 0f 95 c0
                             setne %al
40258b: 0f b6 c0
                             movzbl %al, %eax
40258e: f7 d8
                             neg
                                    %eax
402590: e9 f3 00 00 00
                             jmpq 402688 <submitr+0x7a8>
402595: 48 8d 84 24 40 40 00 lea
                                   0x4040(%rsp),%rax
40259c: 00
40259d: 48 89 04 24
                                    %rax, (%rsp)
                              mov
4025a1: 4d 89 f9
                              mov
                                    %r15,%r9
4025a4: 4c 8b 44 24 18
                              mov
                                    0x18(%rsp),%r8
4025a9: 48 8b 4c 24 10
                                   0x10(%rsp),%rcx
                              mov
4025ae: 48 8b 54 24 08
                                   0x8(%rsp),%rdx
                             mov
4025b3: be b0 33 40 00
                             mov $0x4033b0,%esi
4025b8: 48 8d bc 24 40 60 00 lea 0x6040(%rsp),%rdi
4025bf: 00
4025c0: b8 00 00 00 00
                              mov $0x0, %eax
4025c5: e8 66 e6 ff ff
                             callq 400c30 <sprintf@plt>
4025ca: 48 8d bc 24 40 60 00 lea
                                   0x6040(%rsp),%rdi
4025d1: 00
4025d2: b8 00 00 00 00
                              mov
                                    $0x0, %eax
4025d7: 48 c7 c1 ff ff ff
                              mov
                                    $0xfffffffffffffff, %rcx
4025de: f2 ae
                              repnz scas %es:(%rdi),%al
4025e0: 48 f7 d1
                              not
                                    %rcx
4025e3: 48 83 e9 01
                              sub
                                     $0x1, %rcx
4025e7: 49 89 cd
                              mov
                                   %rcx,%r13
4025ea: Of 84 03 fd ff ff
                                   4022f3 <submitr+0x413>
                              jе
4025f0: 48 89 cb
                              mov
                                    %rcx,%rbx
4025f3: 48 8d ac 24 40 60 00 lea
                                   0x6040(%rsp),%rbp
```

```
4025fa: 00
 4025fb: e9 64 fc ff ff
                                 jmpq
                                      402264 <submitr+0x384>
 402600: 48 b8 45 72 72 6f 72
                                 movabs $0x52203a726f727245, %rax
 402607: 3a 20 52
                                       %rax,(%r14)
 40260a: 49 89 06
                                 mov
 40260d: 48 b8 65 73 75 6c 74
                                 movabs $0x747320746c757365, %rax
 402614: 20 73 74
 402617: 49 89 46 08
                                 mov
                                        %rax, 0x8 (%r14)
 40261b: 48 b8 72 69 6e 67 20
                                 movabs $0x6e6f6320676e6972, %rax
 402622: 63 6f 6e
 402625: 49 89 46 10
                                 mov
                                        %rax,0x10(%r14)
 402629: 48 b8 74 61 69 6e 73
                                 movabs $0x6e6120736e696174,%rax
 402630: 20 61 6e
 402633: 49 89 46 18
                                       %rax,0x18(%r14)
                                 mov
 402637: 48 b8 20 69 6c 6c 65
                                 movabs $0x6c6167656c6c6920, %rax
 40263e: 67 61 6c
 402641: 49 89 46 20
                                 mov
                                        %rax, 0x20 (%r14)
 402645: 48 b8 20 6f 72 20 75
                                 movabs $0x72706e7520726f20,%rax
 40264c: 6e 70 72
 40264f: 49 89 46 28
                                        %rax, 0x28 (%r14)
                                 mov
 402653: 48 b8 69 6e 74 61 62
                                 movabs $0x20656c6261746e69, %rax
 40265a: 6c 65 20
 40265d: 49 89 46 30
                                 mov
                                        %rax,0x30(%r14)
 402661: 48 b8 63 68 61 72 61
                                 movabs $0x6574636172616863, %rax
 402668: 63 74 65
 40266b: 49 89 46 38
                                 mov
                                       %rax,0x38(%r14)
 40266f: 66 41 c7 46 40 72 2e
                                 movw $0x2e72,0x40(%r14)
 402676: 41 c6 46 42 00
                                 movb $0x0,0x42(\$r14)
 40267b: 44 89 e7
                                 mov
                                       %r12d,%edi
 40267e: e8 cd e4 ff ff
                                 callq 400b50 <close@plt>
 402683: b8 ff ff ff
                                 mov
                                       $0xffffffff, %eax
 402688: 48 81 c4 68 a0 00 00
                                      $0xa068,%rsp
                                 add
 40268f: 5b
                                       %rbx
                                 pop
 402690: 5d
                                        %rbp
                                 pop
 402691: 41 5c
                                 pop
                                       %r12
 402693: 41 5d
                                 pop
                                       %r13
 402695: 41 5e
                                        %r14
                                 pop
 402697: 41 5f
                                        %r15
                                 pop
 402699: c3
                                 retq
000000000040269a <init timeout>:
                                 push
 40269a: 53
                                        %rbx
 40269b: 89 fb
                                        %edi,%ebx
                                 mov
 40269d: 85 ff
                                 test
                                        %edi,%edi
 40269f: 74 1e
                                        4026bf <init timeout+0x25>
                                 jе
 4026a1: be a0 1d 40 00
                                 mov
                                        $0x401da0,%esi
 4026a6: bf 0e 00 00 00
                                 mov
                                        $0xe, %edi
 4026ab: e8 e0 e4 ff ff
                                 callq 400b90 <signal@plt>
 4026b0: 85 db
                                        %ebx, %ebx
                                 test
 4026b2: bf 00 00 00 00
                                 mov
                                        $0x0, %edi
 4026b7: Of 49 fb
                                cmovns %ebx, %edi
 4026ba: e8 81 e4 ff ff
                                callq 400b40 <alarm@plt>
 4026bf:
         5b
                                 pop
                                        %rbx
 4026c0:
           с3
                                 retq
```

```
00000000004026c1 <init driver>:
 4026c1: 55
                                  push
                                         %rbp
         53
 4026c2:
                                  push
                                         %rbx
 4026c3: 48 83 ec 18
                                  sub
                                         $0x18,%rsp
 4026c7: 48 89 fd
                                         %rdi,%rbp
                                  mov
 4026ca: be 01 00 00 00
                                  mov
                                         $0x1, %esi
 4026cf: bf 0d 00 00 00
                                         $0xd, %edi
                                  mov
 4026d4: e8 b7 e4 ff ff
                                  callq 400b90 <signal@plt>
 4026d9: be 01 00 00 00
                                         $0x1,%esi
                                  mov
 4026de: bf 1d 00 00 00
                                         $0x1d, %edi
                                  mov
 4026e3: e8 a8 e4 ff ff
                                  callq 400b90 <signal@plt>
 4026e8: be 01 00 00 00
                                         $0x1,%esi
                                  mov
 4026ed: bf 1d 00 00 00
                                         $0x1d, %edi
                                  mov
 4026f2: e8 99 e4 ff ff
                                  callq 400b90 <signal@plt>
 4026f7: ba 00 00 00 00
                                         $0x0, %edx
                                  mov
 4026fc: be 01 00 00 00
                                  mov
                                         $0x1,%esi
 402701: bf 02 00 00 00
                                  mov
                                         $0x2, %edi
 402706: e8 75 e5 ff ff
                                  callq 400c80 <socket@plt>
 40270b: 89 c3
                                         %eax, %ebx
                                  mov
 40270d: 85 c0
                                         %eax, %eax
                                  test
 40270f:
          79 4f
                                         402760 <init driver+0x9f>
                                  jns
 402711:
         48 b8 45 72 72 6f 72
                                  movabs $0x43203a726f727245, %rax
 402718: 3a 20 43
 40271b: 48 89 45 00
                                  mov
                                         %rax, 0x0 (%rbp)
 40271f:
          48 b8 6c 69 65 6e 74
                                  movabs $0x6e7520746e65696c, %rax
           20 75 6e
 402726:
 402729: 48 89 45 08
                                         %rax, 0x8 (%rbp)
                                  mov
 40272d: 48 b8 61 62 6c 65 20
                                  movabs $0x206f7420656c6261, %rax
 402734:
          74 6f 20
 402737: 48 89 45 10
                                         %rax, 0x10 (%rbp)
                                  mov
 40273b: 48 b8 63 72 65 61 74
                                  movabs $0x7320657461657263, %rax
 402742: 65 20 73
 402745: 48 89 45 18
                                         %rax, 0x18 (%rbp)
                                  mov
 402749: c7 45 20 6f 63 6b 65
                                  movl
                                         $0x656b636f,0x20(%rbp)
 402750: 66 c7 45 24 74 00
                                  movw
                                         $0x74,0x24(%rbp)
 402756: b8 ff ff ff
                                         $0xffffffff, %eax
                                  mov
         e9 f8 00 00 00
 40275b:
                                  jmpq
                                         402858 <init driver+0x197>
 402760: bf 48 34 40 00
                                         $0x403448, %edi
                                  mov
 402765: e8 36 e4 ff ff
                                  callq 400ba0 <gethostbyname@plt>
 40276a: 48 85 c0
                                  test
                                         %rax,%rax
                                         4027d7 <init driver+0x116>
 40276d:
           75 68
                                  jne
 40276f: 48 b8 45 72 72 6f 72
                                  movabs $0x44203a726f727245,%rax
 402776: 3a 20 44
         48 89 45 00
 402779:
                                         %rax, 0x0 (%rbp)
                                  mov
          48 b8 4e 53 20 69 73
 40277d:
                                  movabs $0x6e7520736920534e, %rax
          20 75 6e
 402784:
 402787:
         48 89 45 08
                                  mov
                                         %rax, 0x8 (%rbp)
 40278b:
           48 b8 61 62 6c 65 20
                                  movabs $0x206f7420656c6261, %rax
           74 6f 20
 402792:
 402795: 48 89 45 10
                                         %rax, 0x10 (%rbp)
                                  mov
 402799: 48 b8 72 65 73 6f 6c
                                  movabs $0x2065766c6f736572, %rax
 4027a0:
           76 65 20
 4027a3:
           48 89 45 18
                                  mov
                                         %rax, 0x18 (%rbp)
```

```
4027a7: 48 b8 73 65 72 76 65 movabs $0x6120726576726573,%rax
 4027ae: 72 20 61
 4027b1: 48 89 45 20
                                mov
                                       %rax,0x20(%rbp)
 4027b5: c7 45 28 64 64 72 65
                                movl
                                       $0x65726464,0x28(%rbp)
                                movw
 4027bc: 66 c7 45 2c 73 73
                                       $0x7373,0x2c(%rbp)
 4027c2: c6 45 2e 00
                                movb
                                       $0x0,0x2e(%rbp)
 4027c6: 89 df
                                mov
                                       %ebx, %edi
 4027c8: e8 83 e3 ff ff
                                callq 400b50 <close@plt>
 4027cd: b8 ff ff ff
                                       $0xffffffff, %eax
                                mov
 4027d2: e9 81 00 00 00
                                       402858 <init driver+0x197>
                                jmpq
 4027d7: 48 c7 04 24 00 00 00 movq $0x0,(%rsp)
 4027de: 00
 4027df: 48 c7 44 24 08 00 00
                                movq $0x0,0x8(%rsp)
 4027e6: 00 00
 4027e8: 66 c7 04 24 02 00
                                movw
                                       $0x2, (%rsp)
 4027ee: 48 63 50 14
                                movslq 0x14(%rax),%rdx
 4027f2: 48 8d 74 24 04
                                lea
                                       0x4(%rsp),%rsi
 4027f7: 48 8b 40 18
                                mov
                                       0x18(%rax),%rax
 4027fb: 48 8b 38
                                mov
                                      (%rax),%rdi
 4027fe: e8 fd e3 ff ff
                               callq 400c00 <bcopy@plt>
 402803: 66 c7 44 24 02 3b 6e movw
                                       $0x6e3b,0x2(%rsp)
 40280a: ba 10 00 00 00
                                mov
                                       $0x10, %edx
 40280f: 48 89 e6
                                mov
                                       %rsp,%rsi
 402812: 89 df
                                       %ebx,%edi
                               mov
                              callq 400c50 <connect@plt>
 402814: e8 37 e4 ff ff
 402819: 85 c0
                                test
                                       %eax, %eax
 40281b: 79 25
                                       402842 <init driver+0x181>
                               jns
 40281d: ba 48 34 40 00
                                       $0x403448, %edx
                               mov
 402822: be 08 34 40 00
                               mov
                                      $0x403408,%esi
 402827: 48 89 ef
                                       %rbp,%rdi
                               mov
 40282a: b8 00 00 00 00
                               mov
                                       $0x0, %eax
 40282f: e8 fc e3 ff ff
                              callq 400c30 <sprintf@plt>
 402834: 89 df
                               mov
                                       %ebx, %edi
 402836: e8 15 e3 ff ff
                              callq 400b50 <close@plt>
 40283b: b8 ff ff ff
                               mov
                                       $0xffffffff, %eax
 402840: eb 16
                                       402858 <init driver+0x197>
                                jmp
 402842: 89 df
                                       %ebx,%edi
                                mov
 402844: e8 07 e3 ff ff
                                callq 400b50 <close@plt>
 402849: 66 c7 45 00 4f 4b
                                       $0x4b4f,0x0(%rbp)
                                movw
 40284f: c6 45 02 00
                                movb $0x0,0x2(%rbp)
 402853: b8 00 00 00 00
                               mov
                                       $0x0,%eax
 402858: 48 83 c4 18
                                add
                                      $0x18,%rsp
 40285c: 5b
                                      %rbx
                                pop
 40285d: 5d
                                       %rbp
                                pop
 40285e: c3
                                retq
000000000040285f <driver post>:
 40285f: 53
                                push
                                       %rbx
 402860: 48 83 ec 10
                                       $0x10,%rsp
                                sub
 402864: 4c 89 c3
                               mov
                                       %r8,%rbx
 402867: 85 c9
                               test
                                       %ecx, %ecx
 402869: 74 22
                                jе
                                       40288d <driver post+0x2e>
 40286b: 48 89 d6
                                mov
                                       %rdx,%rsi
 40286e: bf 5b 34 40 00
                                mov
                                       $0x40345b, %edi
```

```
402873: b8 00 00 00 00
                               mov
                                      $0x0, %eax
 402878: e8 b3 e2 ff ff
                               callq 400b30 <printf@plt>
 40287d: 66 c7 03 4f 4b
                              movw
                                      $0x4b4f, (%rbx)
 402882: c6 43 02 00
                               movb
                                      $0x0,0x2(%rbx)
 402886: b8 00 00 00 00
                              mov
                                      $0x0,%eax
                               jmp
 40288b: eb 43
                                      4028d0 < driver post + 0x71 >
 40288d: 48 85 ff
                               test %rdi,%rdi
 402890: 74 30
                               jе
                                     4028c2 <driver post+0x63>
 402892: 80 3f 00
                               cmpb $0x0, (%rdi)
                               jе
                                      4028c2 <driver post+0x63>
 402895: 74 2b
 402897: 4c 89 44 24 08
                              mov
                                      %r8,0x8(%rsp)
 40289c: 48 89 14 24
                               mov
                                    %rdx,(%rsp)
 4028a0: 41 b9 72 34 40 00
                                     $0x403472,%r9d
                                mov
 4028a6: 49 89 f0
                                     %rsi,%r8
                                mov
 4028a9: 48 89 f9
                               mov
                                     %rdi,%rcx
 4028ac: ba 76 34 40 00
                              mov
                                    $0x403476, %edx
 4028b1: be 6e 3b 00 00
                              mov
                                     $0x3b6e,%esi
                              mov $0x403448, %edi
 4028b6: bf 48 34 40 00
                              callq 401ee0 <submitr>
 4028bb: e8 20 f6 ff ff
 4028c0: eb 0e
                               jmp 4028d0 < driver post + 0x71 >
 4028c2: 66 c7 03 4f 4b
                               movw $0x4b4f, (%rbx)
 4028c7: c6 43 02 00
                               movb $0x0,0x2(%rbx)
 4028cb: b8 00 00 00 00
                               mov $0x0, %eax
 4028d0: 48 83 c4 10
                                add
                                     $0x10,%rsp
 4028d4: 5b
                                     %rbx
                                pop
 4028d5: c3
                                reta
 4028d6: 66 2e 0f 1f 84 00 00 nopw %cs:0x0(%rax,%rax,1)
 4028dd: 00 00 00
00000000004028e0 <__libc_csu_init>:
 4028e0: 41 57
                                      %r15
                                push
 4028e2: 41 89 ff
                                mov
                                      %edi,%r15d
 4028e5: 41 56
                                      %r14
                                push
 4028e7: 49 89 f6
                                      %rsi,%r14
                                mov
 4028ea: 41 55
                                push
                                      %r13
 4028ec: 49 89 d5
                                      %rdx,%r13
                                mov
 4028ef: 41 54
                                push
                                       %r12
 4028f1: 4c 8d 25 18 15 20 00
                                lea
                                      0x201518(%rip),%r12
603e10 < frame dummy init array entry>
 4028f8: 55
                                push %rbp
 4028f9: 48 8d 2d 18 15 20 00
                                lea
                                     0x201518(%rip),%rbp
603e18 < init array end>
 402900: 53
                                      %rbx
                                push
 402901: 4c 29 e5
                                sub
                                      %r12,%rbp
 402904: 31 db
                                      %ebx, %ebx
                                xor
 402906: 48 c1 fd 03
                                sar
                                      $0x3,%rbp
 40290a: 48 83 ec 08
                               sub
                                      $0x8,%rsp
 40290e: e8 85 e1 ff ff
                              callq 400a98 < init>
 402913: 48 85 ed
                                       %rbp,%rbp
                                test
          74 1e
                                       402936 < libc csu init+0x56>
 402916:
                               jе
 402918: Of 1f 84 00 00 00 00 nopl 0x0(%rax,%rax,1)
 40291f: 00
 402920: 4c 89 ea
                                mov
                                       %r13,%rdx
 402923: 4c 89 f6
                                mov
                                      %r14,%rsi
```

```
402926: 44 89 ff
                             mov %r15d,%edi
                             callq *(%r12,%rbx,8)
 402929: 41 ff 14 dc
 40292d: 48 83 c3 01
                             add $0x1,%rbx
 402931: 48 39 eb
                                   %rbp,%rbx
                             cmp
                             jne 402920 <__libc_csu_init+0x40> add $0x8,%rsp
 402934: 75 ea
 402936: 48 83 c4 08
40293a: 5b
                             pop %rbx
 40293b: 5d
                             pop %rbp
 40293c: 41 5c
                                  %r12
                             pop
                             pop %r13
 40293e: 41 5d
 402940: 41 5e
                             pop %r14
 402942: 41 5f
                             pop %r15
 402944: c3
                              retq
 402945: 90
                              nop
 402946: 66 2e 0f 1f 84 00 00 nopw %cs:0x0(%rax, %rax, 1)
 40294d: 00 00 00
0000000000402950 <__libc_csu_fini>:
 402950: f3 c3
                              repz retq
Disassembly of section .fini:
0000000000402954 < fini>:
 402954: 48 83 ec 08
                             sub
                                     $0x8,%rsp
 402958: 48 83 c4 08
                             add
                                     $0x8,%rsp
 40295c: c3
```

retq