```
bufbomb:
             file format elf32-i386
Disassembly of section bstack:
55586000 <_reserved>:
        . . .
Disassembly of section .interp:
08048154 <.interp>:
                 2f
 8048154:
                                             das
 8048155:
                  6c
                                             insb
                                                     (%dx),%es:(%edi)
                  69 62 2f 6c 64 2d 6c
 8048156:
                                             imul
                                                     $0x6c2d646c,0x2f(%edx),%esp
 804815d:
                  69 6e 75 78 2e 73 6f
                                             imul
                                                     $0x6f732e78,0x75(%esi),%ebp
                 2e 32 00
 8048164:
                                             xor
                                                     %cs:(%eax),%al
Disassembly of section .note.ABI-tag:
08048168 <.note.ABI-tag>:
                 04 00
 8048168:
                                             add
                                                     $0x0,%al
 804816a:
                  00 00
                                             add
                                                     %al,(%eax)
 804816c:
                  10 00
                                             adc
                                                     %al,(%eax)
 804816e:
                  99 99
                                                     %al,(%eax)
                                             add
 8048170:
                  01 00
                                             add
                                                     %eax,(%eax)
 8048172:
                  00 00
                                             add
                                                     %al, (%eax)
 8048174:
                  47
                                             inc
                                                     %edi
 8048175:
                  4e
                                             dec
                                                     %esi
 8048176:
                  55
                                             push
                                                     %ebp
                  00 00
                                                     %al,(%eax)
 8048177:
                                             add
                                                     %al,(%eax)
                  00 00
 8048179:
                                             add
 804817b:
                  00 02
                                             add
                                                     %al,(%edx)
 804817d:
                  00 00
                                             add
                                                     %al, (%eax)
                                                     %al,(%esi)
 804817f:
                  00 06
                                             add
                  00 00
 8048181:
                                             add
                                                     %al,(%eax)
 8048183:
                  00 20
                                             add
                                                     %ah,(%eax)
 8048185:
                  00 00
                                             add
                                                     %al, (%eax)
Disassembly of section .note.gnu.build-id:
08048188 <.note.gnu.build-id>:
 8048188:
                 04 00
                                             add
                                                     $0x0,%al
 804818a:
                  00 00
                                             add
                                                     %al,(%eax)
 804818c:
                  14 00
                                             adc
                                                     $0x0,%al
                                                     %al,(%eax)
                  00 00
 804818e:
                                             add
                  03 00
 8048190:
                                             add
                                                     (%eax),%eax
 8048192:
                  00 00
                                             add
                                                     %al,(%eax)
                  47
 8048194:
                                             inc
                                                     %edi
 8048195:
                  4e
                                                     %esi
                                             dec
 8048196:
                  55
                                             push
                                                     %ebp
 8048197:
                  00 0e
                                                     %cl,(%esi)
                                             add
 8048199:
                  87 13
                                             xchg
                                                     %edx,(%ebx)
 804819b:
                 3c e5
                                                     $0xe5,%al
                                             cmp
 804819d:
                  c3
                                             ret
 804819e:
                  a8 69
                                                     $0x69,%al
                                             test
 80481a0:
                                             std
                  fd
                  84 2b
                                                     %ch, (%ebx)
 80481a1:
                                             test
 80481a3:
                  cf
                                             iret
 80481a4:
                  18 7e be
                                                     %bh,-0x42(%esi)
                                             sbb
 80481a7:
                                             lret
                  cb
 80481a8:
                  56
                                             push
                                                     %esi
 80481a9:
                  0b dd
                                             or
                                                     %ebp,%ebx
 80481ab:
                 db
                                             .byte 0xdb
Disassembly of section .gnu.hash:
080481ac <.gnu.hash>:
                  03 00
                                             hhs
 80481ac:
                                                     (%eax),%eax
 80481ae:
                  00 00
                                             add
                                                     %al,(%eax)
 80481b0:
                  27
                                             daa
 80481b1:
                  00 00
                                             add
                                                     %al,(%eax)
 80481b3:
                 00 01
                                                     %al,(%ecx)
                                             add
 80481b5:
                  00 00
                                             add
                                                     %al,(%eax)
```

80481b7:

00 05 00 00 00 80

%al,0x80000000

add

```
80481bd:
                 28 26
                                             sub
                                                    %ah,(%esi)
                                                    (%eax),%al
 80481bf:
                  22 00
                                             and
 80481c1:
                 00 00
                                             add
                                                    %al,(%eax)
 80481c3:
                  00 27
                                                    %ah, (%edi)
                                             add
                                                    %al,(%eax)
 80481c5:
                  00 00
                                             add
 80481c7:
                 00 2a
                                             add
                                                    %ch,(%edx)
 80481c9:
                  00 00
                                             add
                                                    %al,(%eax)
 80481cb:
                  00
                    38
                                                    %bh, (%eax)
                                             add
                                             repnz mov (%esp,%ebp,4),%ebx
 80481cd:
                 f2 8b 1c ac
 80481d1:
                  4b
                                             dec
                                                    %ebx
 80481d2:
                  e3 c0
                                             jecxz
                                                    8048194 <_init-0x62c>
                  67 55
 80481d4:
                                             addr16 push %ebp
 80481d6:
                  61
                                             popa
 80481d7:
                  10
                                             .byte 0x10
 80481d8:
                  b3 a2
                                                    $0xa2,%bl
                                             moν
 80481da:
                  f7 12
                                             notl
                                                     (%edx)
Disassembly of section .dynsym:
080481dc <.dynsym>:
 80481ec:
                 21 01
                                             and
                                                    %eax,(%ecx)
 80481f6:
                  00 00
                                             add
                                                    %al,(%eax)
                  12 00
 80481f8:
                                             adc
                                                    (%eax),%al
 80481fa:
                  00 00
                                             add
                                                    %al,(%eax)
 80481fc:
                 a4
                                             movsb
                                                    %ds:(%esi),%es:(%edi)
 8048205:
                                                    %al,(%eax)
                 00 00
                                             add
 8048207:
                 00 12
                                             add
                                                    %dl,(%edx)
                                                    %al,(%eax)
 8048209:
                 00 00
                                             add
 804820b:
                 00 04 01
                                                    %al, (%ecx, %eax, 1)
                                             add
 8048216:
                 00 00
                                             add
                                                    %al,(%eax)
 8048218:
                 12 00
                                             adc
                                                    (%eax),%al
 804821a:
                 00 00
                                             add
                                                    %al,(%eax)
 804821c:
                 34 00
                                             xor
                                                    $0x0,%al
 8048226:
                 00 00
                                                    %al,(%eax)
                                             add
 8048228:
                  12 00
                                             adc
                                                    (%eax),%al
 804822a:
                 00 00
                                             add
                                                    %al,(%eax)
                                             jЬ
 804822c:
                 72 00
                                                    804822e <_init-0x592>
 8048236:
                 00 00
                                                    %al,(%eax)
                                             add
 8048238:
                  12 00
                                             adc
                                                    (%eax),%al
 804823a:
                  00 00
                                                    %al,(%eax)
                                             add
 804823c:
                 b0 00
                                                    $0x0,%al
                                             mov
 8048246:
                  00 00
                                             add
                                                    %al,(%eax)
 8048248:
                 12 00
                                             adc
                                                    (%eax),%al
                                                    %al,(%eax)
 804824a:
                  00 00
                                             add
                 c2 00 00
 804824c:
                                             ret
                                                    $0x0
 8048257:
                  00 12
                                             add
                                                    %dl,(%edx)
 8048259:
                 00 00
                                                    %al,(%eax)
                                             add
                 00 59 00
 804825b:
                                             add
                                                    %bl,0x0(%ecx)
 8048266:
                 00 00
                                             add
                                                    %al,(%eax)
 8048268:
                  12 00
                                             adc
                                                    (%eax),%al
 804826a:
                  00 00
                                             add
                                                    %al,(%eax)
 804826c:
                                             (bad)
                  d6
 8048275:
                  00 00
                                             add
                                                    %al,(%eax)
 8048277:
                  00 12
                                             add
                                                    %dl,(%edx)
                                                    %al,(%eax)
                  00 00
 8048279:
                                             add
                 00 18
                                                    %bl,(%eax)
 804827b:
                                             add
 804827d:
                 01 00
                                             add
                                                    %eax,(%eax)
 8048287:
                 00 12
                                             add
                                                    %dl,(%edx)
                                                    %al,(%eax)
 8048289:
                  00 00
                                             add
                 00 2d 00 00 00 00
 804828b:
                                             add
                                                    %ch,0x0
                                                    %al,(%eax)
 8048291:
                  00 00
                                             add
                                                    %al,(%eax)
                 00 00
 8048293:
                                             add
 8048295:
                 00 00
                                                    %al,(%eax)
                                             add
 8048297:
                  00 12
                                             add
                                                    %dl,(%edx)
 8048299:
                  00 00
                                                    %al, (%eax)
                                             add
```

```
804829b:
                 00 fd
                                            add
                                                    %bh,%ch
80482a5:
                 00 00
                                            add
                                                    %al,(%eax)
80482a7:
                 00 12
                                                    %dl, (%edx)
                                            add
                                                    %al,(%eax)
80482a9:
                 00 00
                                            add
                 00 0c 01
80482ab:
                                            add
                                                    %cl,(%ecx,%eax,1)
80482b6:
                 00 00
                                            add
                                                    %al,(%eax)
                 12 00
80482b8:
                                            adc
                                                    (%eax),%al
80482ba:
                 00 00
                                                    %al,(%eax)
                                            add
80482bc:
                 21 00
                                            and
                                                    %eax,(%eax)
80482c6:
                                                    %al,(%eax)
                 00 00
                                            add
80482c8:
                 12 00
                                            adc
                                                    (%eax),%al
80482ca:
                 00 00
                                                    %al,(%eax)
                                            add
80482cc:
                 6b 00 00
                                                    $0x0,(%eax),%eax
                                            imul
80482d7:
                 00 12
                                                    %dl,(%edx)
                                            add
                                                    %al,(%eax)
80482d9:
                 00 00
                                            add
                                                    %dh,%cl
80482db:
                 00 f1
                                            add
80482e5:
                                                    %al,(%eax)
                 00 00
                                            add
80482e7:
                 00 12
                                                    %dl, (%edx)
                                            add
                                                    %al,(%eax)
80482e9:
                 00 00
                                            add
                 00 60 00
80482eb:
                                            add
                                                    %ah,0x0(%eax)
80482f6:
                 00 00
                                            add
                                                    %al,(%eax)
80482f8:
                 12 00
                                                    (%eax),%al
                                            adc
80482fa:
                 00 00
                                            add
                                                    %al,(%eax)
80482fc:
                 3a 01
                                                    (%ecx),%al
                                            cmp
                                                    %al,(%eax)
8048306:
                 00 00
                                            add
8048308:
                 20 00
                                            and
                                                    %al,(%eax)
804830a:
                 00 00
                                                    %al, (%eax)
                                            add
804830c:
                 28 00
                                                    %al, (%eax)
                                            sub
8048316:
                 00 00
                                            add
                                                    %al,(%eax)
8048318:
                 12 00
                                            adc
                                                    (%eax),%al
                                                    %al,(%eax)
804831a:
                 00 00
                                            add
804831c:
                 3b 00
                                            cmp
                                                    (%eax),%eax
8048326:
                 00 00
                                            add
                                                    %al,(%eax)
                                                    (%eax),%al
8048328:
                 12 00
                                            adc
804832a:
                 00 00
                                            add
                                                    %al,(%eax)
804832c:
                 79 00
                                                    804832e <_init-0x492>
                                            jns
8048336:
                 00 00
                                                    %al,(%eax)
                                            add
8048338:
                 12 00
                                            adc
                                                    (%eax),%al
804833a:
                 00 00
                                            add
                                                    %al,(%eax)
804833c:
                 85 00
                                                    %eax,(%eax)
                                            test
8048346:
                 00 00
                                                    %al,(%eax)
                                            add
8048348:
                 12 00
                                                    (%eax),%al
                                            adc
                                                    %al,(%eax)
804834a:
                 00 00
                                            add
                 28 01
804834c:
                                                    %al,(%ecx)
                                            sub
8048356:
                 00 00
                                            add
                                                    %al,(%eax)
8048358:
                 12 00
                                                    (%eax),%al
                                            adc
804835a:
                 00 00
                                                    %al,(%eax)
                                            add
804835c:
                 fe 00
                                            incb
                                                    (%eax)
8048366:
                 00 00
                                            add
                                                    %al,(%eax)
8048368:
                 12 00
                                            adc
                                                    (%eax),%al
804836a:
                 00 00
                                            add
                                                    %al,(%eax)
                 a9 00 00 00 00
804836c:
                                            test
                                                    $0x0,%eax
                                                    %al,(%eax)
                 00 00
8048371:
                                            add
8048373:
                 00 00
                                            add
                                                    %al,(%eax)
8048375:
                 00 00
                                            add
                                                    %al,(%eax)
8048377:
                 00 12
                                                    %dl,(%edx)
                                            add
                 00 00
                                            add
                                                    %al,(%eax)
8048379:
                 00 b7 00 00 00 00
804837b:
                                            add
                                                    %dh,0x0(%edi)
                                                    %al,(%eax)
8048381:
                 00 00
                                            add
                                                    %al,(%eax)
                 00 00
8048383:
                                            add
8048385:
                 00 00
                                                    %al,(%eax)
                                            add
8048387:
                 00 12
                                            add
                                                    %dl,(%edx)
8048389:
                 00 00
                                                    %al, (%eax)
                                            add
```

```
00 41 00
804838b:
                                             add
                                                     %al,0x0(%ecx)
8048396:
                 00 00
                                             add
                                                     %al,(%eax)
8048398:
                 12 00
                                                     (%eax),%al
                                             adc
                                                     %al,(%eax)
804839a:
                 00 00
                                             add
                 8c 00
804839c:
                                             mov
                                                     %es,(%eax)
80483a6:
                 00 00
                                             add
                                                     %al,(%eax)
                                                     (%eax),%al
80483a8:
                 12 00
                                             adc
80483aa:
                                                     %al,(%eax)
                 00 00
                                             add
80483ac:
                 93
                                             xchg
                                                     %eax,%ebx
                                                     %al,(%eax)
80483b5:
                 00 00
                                             add
80483b7:
                 00 12
                                             add
                                                     %dl,(%edx)
80483b9:
                 00 00
                                                     %al, (%eax)
                                             add
80483bb:
                 00 3c 00
                                             add
                                                     %bh,(%eax,%eax,1)
80483c6:
                 00 00
                                             add
                                                     %al,(%eax)
80483c8:
                 12 00
                                                     (%eax),%al
                                             adc
                                                     %al,(%eax)
80483ca:
                 00 00
                                             add
80483cc:
                 dc 00
                                             faddl
                                                     (%eax)
80483d6:
                 00 00
                                             add
                                                     %al,(%eax)
                                                     (%eax),%al
80483d8:
                 12 00
                                             adc
80483da:
                 00 00
                                                     %al,(%eax)
                                             add
80483dc:
                 33 00
                                                     (%eax),%eax
                                             xor
80483e6:
                 00 00
                                                     %al,(%eax)
                                             add
80483e8:
                 12 00
                                             adc
                                                     (%eax),%al
80483ea:
                 00 00
                                             add
                                                     %al,(%eax)
80483ec:
                 1a 00
                                             sbb
                                                     (%eax),%al
80483f6:
                 00 00
                                                     %al,(%eax)
                                             add
80483f8:
                 12 00
                                                     (%eax),%al
                                             adc
80483fa:
                 00 00
                                             add
                                                     %al,(%eax)
                 05 01 00 00 00
80483fc:
                                             add
                                                     $0x1,%eax
8048401:
                 00 00
                                             add
                                                     %al,(%eax)
8048403:
                 00 00
                                             add
                                                     %al, (%eax)
                 00 00
                                                     %al,(%eax)
8048405:
                                             add
                                                     %dl,(%edx)
                 00 12
8048407:
                                             add
8048409:
                 00 00
                                             add
                                                     %al,(%eax)
804840b:
                 00 e3
                                             add
                                                     %ah,%bl
8048415:
                                                     %al,(%eax)
                 00 00
                                             add
8048417:
                 00 12
                                             add
                                                     %dl,(%edx)
8048419:
                 00 00
                                                     %al, (%eax)
                                             add
                 00 51 00
804841b:
                                                     %dl,0x0(%ecx)
                                             add
8048426:
                 00 00
                                             add
                                                     %al,(%eax)
8048428:
                 12 00
                                                     (%eax),%al
                                             adc
                                                     %al,(%eax)
804842a:
                 00 00
                                             add
804842c:
                 12 01
                                             adc
                                                     (%ecx),%al
8048436:
                 00 00
                                             add
                                                     %al,(%eax)
8048438:
                 12 00
                                             adc
                                                     (%eax),%al
804843a:
                 00 00
                                             add
                                                     %al,(%eax)
804843c:
                 7e 00
                                                     804843e <_init-0x382>
                                             jle
8048446:
                 00 00
                                                     %al,(%eax)
                                             add
8048448:
                 12 00
                                             \operatorname{\mathsf{adc}}
                                                     (%eax),%al
804844a:
                 00 00
                                                     %al,(%eax)
                                             add
804844c:
                 cf
                                             iret
804844d:
                 00 00
                                                     %al,(%eax)
                                             add
804844f:
                 00 00
                                             add
                                                     %al,(%eax)
                 b2 04
                                                     $0x4,%dl
8048451:
                                             mov
                 08 04 00
                                                     %al,(%eax,%eax,1)
8048453:
                                             or
8048456:
                 00 00
                                             add
                                                     %al,(%eax)
                                             \operatorname{\mathsf{adc}}
8048458:
                 11 00
                                                     %eax,(%eax)
804845a:
                 1a 00
                                                     (%eax),%al
                                             sbb
804845c:
                 0b 00
                                                     (%eax),%eax
                                             or
804845e:
                 00 00
                                             add
                                                     %al,(%eax)
8048460:
                 dc a2 04 08 04 00
                                             fsubl
                                                     0x40804(%edx)
8048466:
                 00 00
                                                     %al,(%eax)
                                             add
8048468:
                 11 00
                                                     %eax,(%eax)
                                             adc
804846a:
                 10 00
                                             adc
                                                     %al,(%eax)
804846c:
                 65 00 00
                                             add
                                                     %al,%gs:(%eax)
```

```
804846f:
                  00 04 b2
                                             add
                                                    %al,(%edx,%esi,4)
                  04 08
 8048472:
                                             hhs
                                                    $0x8,%al
                  04 00
 8048474:
                                             add
                                                    $0x0,%al
 8048476:
                  00 00
                                                    %al,(%eax)
                                             add
                                                    %eax,(%eax)
 8048478:
                  11 00
                                             adc
 804847a:
                  1a 00
                                             sbb
                                                     (%eax),%al
                  c8 00 00 00
 804847c:
                                             enter
                                                    $0x0,$0x0
 8048480:
                  08 b2 04 08 04 00
                                                    %dh,0x40804(%edx)
                                             or
 8048486:
                 00 00
                                             add
                                                    %al,(%eax)
 8048488:
                  11 00
                                                    %eax,(%eax)
                                             adc
 804848a:
                  1a 00
                                             sbb
                                                    (%eax),%al
Disassembly of section .dynstr:
0804848c <.dynstr>:
 804848c:
                 00 6c 69 62
                                             add
                                                    %ch,0x62(%ecx,%ebp,2)
 8048490:
                 63 2e
                                             arpl
                                                    %bp,(%esi)
 8048492:
                  73 6f
                                             jae
                                                    8048503 <_init-0x2bd>
 8048494:
                  2e 36 00 5f 49
                                             cs add %bl,%ss:0x49(%edi)
 8048499:
                  4 f
                                             dec
                                                    %edi
 804849a:
                  5f
                                                    %edi
                                             pop
 804849b:
                  73 74
                                             jae
                                                    8048511 <_init-0x2af>
 804849d:
                  64 69 6e 5f 75 73 65
                                                    $0x64657375,%fs:0x5f(%esi),%ebp
                                             imul
 80484a4:
                  64
 80484a5:
                  00 73 6f
                                             add
                                                    %dh,0x6f(%ebx)
 80484a8:
                  63 6b 65
                                             arpl
                                                    %bp,0x65(%ebx)
 80484ab:
                  74 00
                                             je
                                                    80484ad < init-0x313>
                  73 74
                                                    8048523 <_init-0x29d>
 80484ad:
                                             jae
 80484af:
                  72 63
                                             jb
                                                    8048514 <_init-0x2ac>
 80484b1:
                  70
                    79
                                                    804852c <_init-0x294>
                                             jο
                  00 65 78
                                                    %ah,0x78(%ebp)
 80484b3:
                                             add
                  69 74 00 68 74 6f 6e
                                                    $0x736e6f74,0x68(%eax,%eax,1),%esi
 80484b6:
                                             imul
 80484bd:
                  73
 80484be:
                  00 73 70
                                             add
                                                    %dh,0x70(%ebx)
 80484c1:
                  72 69
                                             jb
                                                    804852c <_init-0x294>
                                                    %ds:(%esi),(%dx)
 80484c3:
                  6e
                                             outsb
 80484c4:
                  74 66
                                                    804852c <_init-0x294>
                                             jе
 80484c6:
                  00 73 72
                                             add
                                                    %dh,0x72(%ebx)
 80484c9:
                  61
                                             popa
 80484ca:
                  6e
                                             outsb
                                                    %ds:(%esi),(%dx)
                  64 00 5f 5f
 80484cb:
                                             add
                                                    %bl,%fs:0x5f(%edi)
 80484cf:
                  69 73 6f 63 39 39 5f
                                             imul
                                                    $0x5f393963,0x6f(%ebx),%esi
 80484d6:
                  73 73
                                             jae
                                                    804854b <_init-0x275>
                                                    %sp,0x6e(%ecx)
 80484d8:
                  63 61 6e
                                             arpl
 80484db:
                  66 00 63 6f
                                             data16 add %ah,0x6f(%ebx)
                                                    %ds:(%esi),(%dx)
 80484df:
                  6e
                                             outsb
 80484e0:
                                                    %ds:(%esi),(%dx)
                  6e
                                             outsb
 80484e1:
                  65 63 74 00 73
                                             arpl
                                                    %si,%gs:0x73(%eax,%eax,1)
 80484e6:
                  69 67 6e 61 6c 00 70
                                             imul
                                                    $0x70006c61,0x6e(%edi),%esp
                  75 74
 80484ed:
                                                    8048563 <_init-0x25d>
                                             ine
                                                    80484f1 <_init-0x2cf>
8048567 <_init-0x259>
                  73 00
 80484ef:
                                             jae
                    74
 80484f1:
                  73
                                             jae
 80484f3:
                  64 69 6e 00 67 65 74
                                                    $0x70746567,%fs:0x0(%esi),%ebp
                                             imul
 80484fa:
                  70
                  69 64 00 73 74 72 64
 80484fb:
                                                    $0x75647274,0x73(%eax,%eax,1),%esp
                                             imul
 8048502:
                  75
 8048503:
                  70 00
                                                    8048505 <_init-0x2bb>
                                             jο
                                                    (%dx),%es:(%edi)
 8048505:
                  6d
                                             insl
 8048506:
                  6d
                                                    (%dx),%es:(%edi)
                                             insl
 8048507:
                  61
                                             popa
 8048508:
                  70 00
                                                    804850a <_init-0x2b6>
                                             10
                                                    %sp,0x6c(%ecx)
 804850a:
                  63 61 6c
                                             arpl
 804850d:
                                                    (%dx),%es:(%edi)
                  6c
                                             insb
 804850e:
                  6f
                                             outsl
                                                    %ds:(%esi),(%dx)
                                                    %ax,(%eax)
 804850f:
                  63 00
                                             arpl
                  73 74
                                                    8048587 <_init-0x239>
 8048511:
                                             jae
                                                    8048581 <_init-0x23f>
 8048513:
                  72 6c
                                             jЬ
 8048515:
                  65 6e
                                             outsb
                                                    %gs:(%esi),(%dx)
 8048517:
                  00 6d 65
                                                    %ch,0x65(%ebp)
                                             add
 804851a:
                  6d
                                             insl
                                                    (%dx),%es:(%edi)
                  73 65
 804851b:
                                             jae
                                                    8048582 <_init-0x23e>
 804851d:
                  74 00
                                             jе
                                                    804851f <_init-0x2a1>
 804851f:
                  5f
                                                    %edi
                                             pop
 8048520:
                  5f
                                                    %edi
                                             pop
                                                    8048596 <_init-0x22a>
 8048521:
                  65 72 72
                                             gs jb
 8048524:
                                                    %ds:(%esi),(%dx)
                  6e
                                             outsb
```

```
8048525:
                                                   %ds:(%esi),(%dx)
                 6f
                                            outsl
8048526:
                 5f
                                                    %edi
                                            pop
8048527:
                 6c
                                            insb
                                                    (%dx),%es:(%edi)
8048528:
                                                    %ds:(%esi),(%dx)
                 6f
                                            outsl
                                                    %sp,0x74(%ecx)
8048529:
                 63 61 74
                                            arpl
                                                    $0x61657200,0x6e(%edi),%ebp
804852c:
                 69 6f 6e 00 72 65 61
                                            imul
8048533:
                 64 00 67 65
                                            add
                                                    %ah,%fs:0x65(%edi)
                 74 6f
8048537:
                                            jе
                                                    80485a8 <_init-0x218>
                                                    80485af < init-0x211>
8048539:
                 70 74
                                            jo
                 00 6d 65
                                                    %ch,0x65(%ebp)
804853b:
                                            add
804853e:
                 6d
                                            insl
                                                    (%dx),%es:(%edi)
                                                    %si,0x79(%eax)
804853f:
                 63 70 79
                                            arpl
                 00 73 74
                                                    %dh,0x74(%ebx)
8048542:
                                            add
8048545:
                 72 63
                                            jb
                                                    80485aa <_init-0x216>
8048547:
                 61
                                            popa
8048548:
                 73 65
                                            jae
                                                    80485af <_init-0x211>
                                                    %bp,0x70(%ebp)
                 63 6d 70
804854a:
                                            arpl
804854d:
                 00 62 7a
                                            add
                                                    %ah,0x7a(%edx)
8048550:
                 65
                   72 6f
                                                    80485c2 <_init-0x1fe>
                                            gs jb
                 00 6f 70
                                            add
                                                    %ch,0x70(%edi)
8048553:
8048556:
                 74 61
                                                    80485b9 < init-0x207>
                                            jе
                                                    80485c1 <_init-0x1ff>
8048558:
                 72 67
                                            jb
804855a:
                 00 73 74
                                            add
                                                    %dh,0x74(%ebx)
                                            fs gs jb 80485d3 <_init-0x1ed>
804855d:
                 64 65 72 72
                                            add
8048561:
                 00 61 6c
                                                    %ah, 0x6c(%ecx)
8048564:
                 61
                                            popa
8048565:
                 72 6d
                                            jb
                                                    80485d4 <_init-0x1ec>
                                                    %ch,0x75(%ebp)
8048567:
                 00 6d 75
                                            add
804856a:
                 6e
                                            outsb
                                                    %ds:(%esi),(%dx)
804856b:
                 6d
                                                    (%dx),%es:(%edi)
                                            insl
804856c:
                 61
                                            popa
                 70 00
                                            jo
                                                    804856f <_init-0x251>
804856d:
                                            addr16 gs je 80485db <_init-0x1e5>
                 67 65 74 68
804856f:
8048573:
                 6f
                                                    %ds:(%esi),(%dx)
                                            outsl
8048574:
                 73
                   74
                                                    80485ea < init-0x1d6>
                                            iae
                 62 79 6e
8048576:
                                            bound
                                                   %edi,0x6e(%ecx)
8048579:
                 61
                                            popa
804857a:
                 6d
                                            insl
                                                    (%dx),%es:(%edi)
804857b:
                 65 00 67 65
                                                    %ah,%gs:0x65(%edi)
                                            add
                 74 68
804857f:
                                            jе
                                                    80485e9 <_init-0x1d7>
8048581:
                 6f
                                            outsl
                                                   %ds:(%esi),(%dx)
                                                    80485f8 <_init-0x1c8>
8048582:
                 73
                                            jae
                                                    %ds:(%esi),(%dx)
8048584:
                 6e
                                            outsb
8048585:
                 61
                                            popa
8048586:
                 6d
                                            insl
                                                    (%dx),%es:(%edi)
                 65 00 66 77
8048587:
                                            add
                                                    %ah,%gs:0x77(%esi)
804858b:
                 72 69
                                            jb
                                                    80485f6 <_init-0x1ca>
                 74 65
                                                    80485f4 < init-0x1cc>
804858d:
                                            jе
804858f:
                 00
                   73 72
                                            add
                                                    %dh,0x72(%ebx)
8048592:
                 61
                                            popa
8048593:
                 6e
                                            outsb
                                                    %ds:(%esi),(%dx)
                 64 6f
8048594:
                                            outsl
                                                    %fs:(%esi),(%dx)
8048596:
                                                    (%dx),%es:(%edi)
                 6d
                                            insl
8048597:
                 00 62 63
                                            add
                                                    %ah, 0x63(%edx)
                                                    %ds:(%esi),(%dx)
804859a:
                 6f
                                            outsl
804859b:
                 70 79
                                            jο
                                                    8048616 <_init-0x1aa>
804859d:
                 00
                   63 6c
                                            add
                                                    %ah,0x6c(%ebx)
                                                    %ds:(%esi),(%dx)
80485a0:
                 6f
                                            outsl
                 73 65
                                                    8048608 <_init-0x1b8>
80485a1:
                                            jae
80485a3:
                 00 5f 49
                                            add
                                                    %bl,0x49(%edi)
80485a6:
                 4f
                                            dec
                                                    %edi
                 5f
80485a7:
                                                    %edi
                                            gog
                 67 65 74 63
                                            addr16 gs je 804860f <_init-0x1b1>
80485a8:
80485ac:
                 00 73 74
                                            add
                                                    %dh,0x74(%ebx)
                 72 63
80485af:
                                            jb
                                                    8048614 <_init-0x1ac>
80485b1:
                 6d
                                                    (%dx),%es:(%edi)
                                            insl
80485b2:
                 70 00
                                            jο
                                                    80485b4 <_init-0x20c>
80485b4:
                 5f
                                            pop
                                                    %edi
80485b5:
                 5f
                                            pop
                                                    %edi
                                                    (%dx),%es:(%edi)
80485h6:
                 6c
                                            insb
                 69 62 63 5f 73 74 61
                                                    $0x6174735f,0x63(%edx),%esp
80485b7:
                                            imul
80485be:
                 72 74
                                            jb
                                                    8048634 <_init-0x18c>
80485c0:
                 5f
                                                    %edi
                                            pop
80485c1:
                 6d
                                            insl
                                                    (%dx),%es:(%edi)
80485c2:
                 61
                                            popa
                 69 6e 00 5f 5f 67 6d
80485c3:
                                            imul
                                                    $0x6d675f5f,0x0(%esi),%ebp
```

```
80485ca:
                  6f
                                              outsl
                                                      %ds:(%esi),(%dx)
 80485cb:
                                                      %ds:(%esi),(%dx)
                  6e
                                              outsb
 80485cc:
                  5f
                                              pop
                                                      %edi
 80485cd:
                  73 74
                                                      8048643 <_init-0x17d>
                                              jae
 80485cf:
                  61
                                               popa
                     74
 80485d0:
                  72
                                               jЬ
                                                      8048646 <_init-0x17a>
 80485d2:
                  5f
                                               pop
 80485d3:
                  5f
                                               pop
                                                      %edi
 80485d4:
                  00 47 4c
                                              add
                                                      %al,0x4c(%edi)
                  49
 80485d7:
                                               dec
                                                      %ecx
 80485d8:
                  42
                                               inc
                                                      %edx
                  43
 80485d9:
                                               inc
                                                      %ebx
                  5f
 80485da:
                                                      %edi
                                               pop
 80485db:
                  32 2e
                                               xor
                                                      (%esi),%ch
 80485dd:
                  37
                                               aaa
 80485de:
                  00 47 4c
                                               add
                                                      %al,0x4c(%edi)
                  49
 80485e1:
                                              dec
                                                      %ecx
 80485e2:
                  42
                                               inc
                                                      %edx
 80485e3:
                  43
                                                      %ebx
                                               inc
 80485e4:
                  5f
                                                      %edi
                                              pop
 80485e5:
                  32 2e
                                                      (%esi),%ch
                                               xor
 80485e7:
                  30 00
                                               xor
                                                      %al,(%eax)
Disassembly of section .gnu.version:
080485ea <.gnu.version>:
 80485ea:
                  00 00
                                              add
                                                      %al,(%eax)
 80485ec:
                  02 00
                                              add
                                                      (%eax),%al
 80485ee:
                  02 00
                                              add
                                                       (%eax),%al
 80485f0:
                  02 00
                                               add
                                                       (%eax),%al
 80485f2:
                  02 00
                                              add
                                                       (%eax),%al
 80485f4:
                  02 00
                                              add
                                                       (%eax),%al
                  02 00
 80485f6:
                                              add
                                                       (%eax),%al
 80485f8:
                  02 00
                                              add
                                                       (%eax),%al
                  02 00
 80485fa:
                                              add
                                                       (%eax),%al
 80485fc:
                  02 00
                                                       (%eax),%al
                                              add
 80485fe:
                  02 00
                                               add
                                                       (%eax),%al
                                                      (%eax),%al
(%eax),%al
 8048600:
                  02
                     00
                                              add
                  02 00
 8048602:
                                              add
                  02 00
                                              add
 8048604:
                                                       (%eax),%al
 8048606:
                  02 00
                                              add
                                                       (%eax),%al
                                                       (%eax),%al
 8048608:
                  02 00
                                              add
                                                       (%eax),%al
 804860a:
                  02 00
                                              add
 804860c:
                  02 00
                                              add
                                                       (%eax),%al
 804860e:
                  00 00
                                               add
                                                      %al,(%eax)
                                                       (%eax),%al
 8048610:
                  02
                     00
                                              add
 8048612:
                  02 00
                                              add
                                                       (%eax),%al
                  02 00
 8048614:
                                               add
                                                       (%eax),%al
 8048616:
                  02 00
                                              add
                                                       (%eax),%al
                  02 00
 8048618:
                                              add
                                                       (%eax),%al
                  02 00
                                               add
                                                       (%eax),%al
 804861a:
 804861c:
                  02 00
                                              add
                                                       (%eax),%al
                                                       (%eax),%al
 804861e:
                  02 00
                                              add
                                                      (%eax),%eax
(%eax),%al
 8048620:
                  03 00
                                              add
 8048622:
                  02 00
                                              add
                                                      (%eax),%al
(%eax),%al
 8048624:
                  02 00
                                               add
 8048626:
                  02
                     00
                                               add
                                                       (%eax),%al
 8048628:
                  02 00
                                              add
                  02 00
                                              add
 804862a:
                                                       (%eax),%al
 804862c:
                  02 00
                                              add
                                                       (%eax),%al
 804862e:
                  02 00
                                                       (%eax),%al
                                              add
 8048630:
                  02 00
                                              add
                                                       (%eax),%al
 8048632:
                  02 00
                                                       (%eax),%al
                                              add
 8048634:
                  02 00
                                               add
                                                       (%eax),%al
                                                      (%eax),%al
(%eax),%al
                  02
                     00
 8048636:
                                              add
                  02 00
 8048638:
                                              add
 804863a:
                  01 00
                                               add
                                                      %eax,(%eax)
 804863c:
                  02 00
                                              add
                                                       (%eax),%al
 804863e:
                  02 00
                                                      (%eax),%al
                                              add
Disassembly of section .gnu.version_r:
08048640 <.gnu.version_r>:
 8048640:
                  01 00
                                              add
                                                      %eax,(%eax)
 8048642:
                  02 00
                                               add
                                                      (%eax),%al
 8048644:
                  01 00
                                               add
                                                      %eax, (%eax)
```

```
8048646:
                  00 00
                                              add
                                                      %al,(%eax)
                                                      %al,(%eax)
 8048648:
                  10 00
                                               adc
 804864a:
                  00 00
                                              add
                                                      %al,(%eax)
 804864c:
                  00 00
                                                      %al, (%eax)
                                               add
                                                      %al,(%eax)
 804864e:
                  00 00
                                               add
 8048650:
                  17
                                               pop
                                                      %SS
                  69 69 0d 00 00 03 00
                                                      $0x30000,0xd(%ecx),%ebp
 8048651:
                                               imul
 8048658:
                  49
                                               dec
                                                      %ecx
 8048659:
                  01 00
                                              add
                                                      %eax,(%eax)
 804865b:
                  00 10
                                               add
                                                      %dl,(%eax)
 804865d:
                  00 00
                                               add
                                                      %al, (%eax)
 804865f:
                                                      %dl,(%eax)
                  00 10
                                              add
                  69 69 0d 00 00 02 00
                                               imul
                                                      $0x20000,0xd(%ecx),%ebp
 8048661:
 8048668:
                  53
                                               push
                                                      %ebx
 8048669:
                  01 00
                                               add
                                                      %eax,(%eax)
                                                      %al,(%eax)
%al,(%eax)
 804866b:
                  00 00
                                               add
                  00 00
 804866d:
                                               add
Disassembly of section .rel.dyn:
08048670 <.rel.dyn>:
 8048670:
                                              hlt
                                                      $0x4,%al
%al,(%esi)
 8048671:
                  b0 04
                                              mov
 8048673:
                  08 06
                                              or
 8048675:
                  12 00
                                               adc
                                                      (%eax),%al
 8048677:
                  00 00
                                               add
                                                      %al,(%eax)
                                                      $0x4,%dl
 8048679:
                  b2 04
                                              mov
                  08 05 27 00 00 04
                                                      %al,0x4000027
 804867b:
                                               or
 8048681:
                  b2 04
                                                      $0x4,%dl
                                              mov
                  08 05 29 00 00 08
                                                      %al,0x8000029
 8048683:
                                              or
                  b2 04
 8048689:
                                              mov
                                                      $0x4,%dl
                                               .byte 0x8
 804868b:
                  08
 804868c:
                  05
                                               .byte 0x5
 804868d:
                  2a 00
                                               sub
                                                      (%eax),%al
Disassembly of section .rel.plt:
08048690 <.rel.plt>:
 8048690:
                  04 b1
                                              add
                                                      $0xb1,%al
 8048692:
                  04 08
                                               add
                                                      $0x8,%al
 8048694:
                  07
                                                      %es
                                               pop
                  01 00
 8048695:
                                               add
                                                      %eax,(%eax)
 8048697:
                  00 08
                                               add
                                                      %cl,(%eax)
 8048699:
                  b1 04
                                                      $0x4,%cl
                                              mov
 804869b:
                  08 07
                                                      %al,(%edi)
                                              or
                  02 00
                                               \operatorname{\mathsf{add}}\nolimits
 804869d:
                                                      (%eax),%al
 804869f:
                  00 0c b1
                                               add
                                                      %cl,(%ecx,%esi,4)
 80486a2:
                  04 08
                                                      $0x8,%al
                                              add
 80486a4:
                  07
                                               pop
                                                      %es
                  03 00
 80486a5:
                                               add
                                                      (%eax),%eax
 80486a7:
                  00 10
                                                      %dl,(%eax)
                                               add
                                                      $0x4,%cl
%al,(%edi)
 80486a9:
                  b1 04
                                              mov
                  08 07
 80486ab:
                                              ٥r
 80486ad:
                  04 00
                                               add
                                                      $0x0,%al
 80486af:
                  00
                     14 b1
                                                      %dl,(%ecx,%esi,4)
                                               add
 80486b2:
                  04 08
                                                      $0x8,%al
                                              add
                  07
 80486b4:
                                               pop
                                                      %es
 80486b5:
                  05 00 00 18 b1
                                               add
                                                      $0xb1180000,%eax
 80486ba:
                  04 08
                                              add
                                                      $0x8,%al
 80486bc:
                  07
                                                      %es
                                               pop
 80486bd:
                  06
                                               push
                                                      %es
 80486be:
                  00 00
                                               add
                                                      %al,(%eax)
                                                      $0xb1,%al
 80486c0:
                  1c b1
                                               sbb
                  04 08
                                                      $0x8,%al
 80486c2:
                                              add
 80486c4:
                  07
                                               pop
                                                      %es
 80486c5:
                  07
                                               pop
 80486c6:
                  00 00
                                                      %al,(%eax)
                                              add
                                                      %dh,0x8070804(%ecx)
                  20 b1 04 08 07 08
 80486c8:
                                               and
                  00 00
 80486ce:
                                               add
                                                      %al,(%eax)
 80486d0:
                  24 b1
                                               and
                                                      $0xb1,%al
 80486d2:
                  04 08
                                               add
                                                      $0x8,%al
 80486d4:
                  ۵7
                                               pop
                                                      %es
                  09 00
                                                      %eax,(%eax)
 80486d5:
                                               or
 80486d7:
                  00 28
                                               add
                                                      %ch, (%eax)
```

```
80486d9:
                 b1 04
                                                     $0x4,%cl
                                             mov
                                                     %al,(%edi)
80486db:
                 08 07
                                             or
80486dd:
                 0a 00
                                             or
                                                     (%eax),%al
80486df:
                 00 2c b1
                                             add
                                                     %ch,(%ecx,%esi,4)
80486e2:
                 04 08
                                             add
                                                     $0x8,%al
80486e4:
                 97
                                             pop
                                                     %es
                 0b 00
80486e5:
                                             or
                                                     (%eax),%eax
80486e7:
                 00
                    30
                                                     %dh, (%eax)
                                             add
                 b1 04
                                                     $0x4,%cl
80486e9:
                                             mov
80486eb:
                 08 07
                                                     %al,(%edi)
                                             or
80486ed:
                 0c 00
                                             or
                                                     $0x0,%al
                                                     %dh,(%ecx,%esi,4)
                 00 34 b1
80486ef:
                                             add
                 04 08
80486f2:
                                             add
                                                     $0x8,%al
80486f4:
                 07
                                             pop
                                                     %es
80486f5:
                 0d 00 00 38 b1
                                                     $0xb1380000,%eax
                                             or
80486fa:
                 04 08
                                             add
                                                     $0x8,%al
80486fc:
                 07
                                                     %es
                                             pop
80486fd:
                 0e
                                             push
                                                     %CS
80486fe:
                 00 00
                                                     %al,(%eax)
                                             add
8048700:
                 3c b1
                                             cmp
                                                     $0xb1,%al
                                                     $0x8,%al
                 04 08
8048702:
                                             add
8048704:
                 07
                                             pop
                                                     %es
8048705:
                 0f 00 00
                                             sldt
                                                     (%eax)
8048708:
                 40
                                             inc
                                                     %eax
                 b1 04
8048709:
                                                     $0x4,%cl
                                             mov
804870b:
                 08 07
                                                     %al,(%edi)
                                             or
804870d:
                 10 00
                                             adc
                                                     %al, (%eax)
804870f:
                 00 44 b1 04
                                                     %al,0x4(%ecx,%esi,4)
                                             add
8048713:
                 08 07
                                             or
                                                     %al,(%edi)
8048715:
                 11 00
                                             adc
                                                     %eax,(%eax)
8048717:
                    48 b1
                                                     %cl,-0x4f(%eax)
                 00
                                             add
                 04 08
                                                     $0x8,%al
804871a:
                                             bba
                 07
804871c:
                                             pop
                                                     %es
804871d:
                 12 00
                                             adc
                                                     (%eax),%al
                 00 4c b1 04
                                                     %cl,0x4(%ecx,%esi,4)
804871f:
                                             add
                                                     %al,(%edi)
                 08 07
8048723:
                                             ٥r
8048725:
                 13 00
                                             adc
                                                     (%eax),%eax
8048727:
                 00
                    50 b1
                                             add
                                                     %dl,-0x4f(%eax)
                 04 08
                                                     $0x8,%al
804872a:
                                             add
                 07
804872c:
                                             pop
                                                     %es
                 14 00
                                                     $0x0,%al
804872d:
                                             adc
                                                     %dl,0x4(%ecx,%esi,4)
804872f:
                 00
                    54 b1 04
                                             add
8048733:
                 08 07
                                                     %al,(%edi)
                                             or
                 15 00 00 58 b1
8048735:
                                                     $0xb1580000,%eax
                                             adc
804873a:
                 04 08
                                             add
                                                     $0x8,%al
804873c:
                 07
                                             pop
                                                     %es
804873d:
                 16
                                             push
                                                     %SS
                 00 00
                                                     %al,(%eax)
804873e:
                                             add
8048740:
                 5с
                                             pop
                                                     %esp
8048741:
                 b1 04
                                                     $0x4,%cl
                                             mov
                                                     %al,(%edi)
8048743:
                 08 07
                                             ٥r
8048745:
                 17
                                             pop
                                                     %SS
8048746:
                 00 00
                                                     %al,(%eax)
                                             add
8048748:
                 60
                                             pusha
                 b1 04
8048749:
                                                     $0x4,%cl
                                             mov
804874b:
                 08 07
                                             or
                                                     %al,(%edi)
804874d:
                 18
                    00
                                                     %al, (%eax)
                                             sbb
804874f:
                 00 64 b1 04
                                                     %ah,0x4(%ecx,%esi,4)
                                             add
                 08 07
8048753:
                                                     %al,(%edi)
                                             or
8048755:
                 19 00
                                             sbb
                                                     %eax,(%eax)
8048757:
                 00 68 b1
                                                     %ch,-0x4f(%eax)
                                             add
804875a:
                 04 08
                                             add
                                                     $0x8,%al
804875c:
                 07
                                             pop
                                                     %es
804875d:
                 1a 00
                                             sbb
                                                     (%eax),%al
                                                     %ch,0x4(%ecx,%esi,4)
804875f:
                 00 6c b1 04
                                             add
8048763:
                 08 07
                                                     %al,(%edi)
                                             or
                                                     (%eax),%eax
8048765:
                 1b 00
                                             sbb
8048767:
                 00
                    70 b1
                                                     %dh,-0x4f(%eax)
                                             add
                                                     $0x8,%al
804876a:
                 04 08
                                             add
                 07
804876c:
                                             pop
                                                     %es
                 1c 00
                                                     $0x0,%al
804876d:
                                             sbb
804876f:
                 00 74 b1 04
                                             add
                                                     %dh,0x4(%ecx,%esi,4)
                 08 07
8048773:
                                                     %al,(%edi)
                                             or
8048775:
                 1d 00 00 78 b1
                                                     $0xb1780000,%eax
                                             sbb
804877a:
                 04 08
                                             add
                                                     $0x8,%al
804877c:
                 07
                                             pop
                                                     %es
```

```
%al,(%eax)
                 00 00
 804877e:
                                            add
 8048780:
                 7c b1
                                            jl
                                                    8048733 <_init-0x8d>
 8048782:
                  04 08
                                                    $0x8,%al
                                            add
 8048784:
                 07
                                                    %es
                                            pop
                 1f
                                                    %ds
 8048785:
                                            pop
 8048786:
                 00 00
                                            add
                                                    %al,(%eax)
 8048788:
                 80 b1 04 08 07 20 00
                                                    $0x0,0x20070804(%ecx)
                                            xorb
 804878f:
                 00 84 b1 04 08 07 21
                                            add
                                                    %al,0x21070804(%ecx,%esi,4)
                 00 00
                                                    %al,(%eax)
 8048796:
                                            add
 8048798:
                 88 b1 04 08 07 22
                                            mov
                                                    %dh,0x22070804(%ecx)
 804879e:
                 00 00
                                            add
                                                    %al,(%eax)
                                                    %?,0x23070804(%ecx)
                 8c b1 04 08 07 23
 80487a0:
                                            mov
 80487a6:
                 00 00
                                            add
                                                    %al,(%eax)
 80487a8:
                 90
                                            nop
 80487a9:
                 b1 04
                                                    $0x4,%cl
                                            mov
                 08 07
                                                    %al,(%edi)
 80487ab:
                                            ٥r
 80487ad:
                 24 00
                                            and
                                                    $0x0,%al
 80487af:
                 00 94 b1 04 08 07 25
                                                    %dl,0x25070804(%ecx,%esi,4)
                                            add
 80487b6:
                 00 00
                                            add
                                                    %al,(%eax)
 80487b8:
                 98
                                            cwtl
 80487b9:
                 b1 04
                                            mov
                                                    $0x4,%cl
 80487bb:
                 08 07
                                                    %al,(%edi)
                                            or
 80487bd:
                 26 00 00
                                            add
                                                    %al,%es:(%eax)
Disassembly of section .init:
080487c0 <_init>:
 80487c0:
                 53
                                            push
                                                    %ebx
 80487c1:
                 83 ec 08
                                                    $0x8,%esp
                                            sub
                 e8 c7 02 00 00
 80487c4:
                                            call
                                                    8048a90 <__x86.get_pc_thunk.bx>
                 81 c3 2f 29 00 00
                                                    $0x292f,%ebx
 80487c9:
                                            add
                 8b 83 fc ff ff ff
 80487cf:
                                            mov
                                                    -0x4(%ebx),%eax
 80487d5:
                 85 c0
                                                    %eax,%eax
                                            test
                 74 05
 80487d7:
                                                    80487de <_init+0x1e>
                                            ie
                                                    8048910 <__gmon_start__@plt>
 80487d9:
                 e8 32 01 00 00
                                            call
 80487de:
                 83 c4 08
                                            add
                                                    $0x8,%esp
 80487e1:
                 5b
                                            pop
                                                    %ebx
 80487e2:
                 c3
                                            ret
Disassembly of section .plt:
080487f0 <strcmp@plt-0x10>:
                 ff 35 fc b0 04 08
ff 25 00 b1 04 08
80487f0:
                                                   0x804b0fc
                                            pushl
 80487f6:
                                            jmp
                                                    *0x804b100
 80487fc:
                 00 00
                                                    %al,(%eax)
                                            add
08048800 <strcmp@plt>:
                 ff 25 04 b1 04 08
                                                    *0x804b104
 8048800:
                                            jmp
 8048806:
                 68 00 00 00 00
                                            push
                                                    $0×0
                 e9 e0 ff ff ff
 804880b:
                                            jmp
                                                    80487f0 <_init+0x30>
08048810 <read@plt>:
                                                    *0x804b108
                ff 25 08 b1 04 08
 8048810:
                                            jmp
 8048816:
                 68 08 00 00 00
                                            push
                                                    $0x8
 804881b:
                 e9 d0 ff ff ff
                                                    80487f0 <_init+0x30>
                                            jmp
08048820 condom@plt>:
 8048820:
                 ff 25 0c b1 04 08
                                                    *0x804b10c
                                            jmp
                 68 10 00 00 00
                                                    $0×10
 8048826:
                                            push
                                                    80487f0 <_init+0x30>
 804882b:
                 e9 c0 ff ff ff
                                            jmp
08048830 <printf@plt>:
 8048830:
                 ff 25 10 b1 04 08
                                            qmj
                                                    *0x804b110
                 68 18 00 00 00
 8048836:
                                            push
                                                    $0x18
 804883b:
                 e9 b0 ff ff ff
                                            jmp
                                                    80487f0 <_init+0x30>
08048840 <strdup@plt>:
                 ff 25 14 b1 04 08
 8048840:
                                                    *0x804b114
                                            jmp
                 68 20 00 00 00
 8048846:
                                            push
                                                    $0x20
 804884b:
                 e9 a0 ff ff ff
                                            jmp
                                                    80487f0 <_init+0x30>
08048850 <memcpy@plt>:
                 ff 25 18 b1 04 08
 8048850:
                                            jmp
                                                    *0x804b118
 8048856:
                 68 28 00 00 00
                                            push
                                                    $0x28
```

%ds

push

804877d:

1e

```
804885b:
                e9 90 ff ff ff
                                           qmj
                                                  80487f0 <_init+0x30>
08048860 <br/> <br/>bzero@plt>:
                 ff 25 1c b1 04 08
8048860:
                                           jmp
                                                   *0x804b11c
8048866:
                 68 30 00 00 00
                                           push
                                                   $0x30
                 e9 80 ff ff ff
                                                   80487f0 <_init+0x30>
804886b:
                                           jmp
08048870 <signal@plt>:
                 ff 25 20 b1 04 08
                                           jmp
8048870:
                                                   *0x804b120
8048876:
                 68 38 00 00 00
                                           push
                                                   $0x38
804887b:
                 e9 70 ff ff ff
                                           jmp
                                                   80487f0 <_init+0x30>
08048880 <alarm@plt>:
                 ff 25 24 b1 04 08
                                                   *0x804b124
8048880:
                                           jmp
8048886:
                 68 40 00 00 00
                                           push
                                                   $0x40
804888b:
                 e9 60 ff ff ff
                                           jmp
                                                   80487f0 <_init+0x30>
08048890 <_IO_getc@plt>:
8048890:
                 ff 25 28 b1 04 08
                                                   *0x804b128
                                           jmp
                 68 48 00 00 00
8048896:
                                           push
                                                   $0x48
804889b:
                 e9 50 ff ff ff
                                                   80487f0 <_init+0x30>
                                           jmp
080488a0 <htons@plt>:
                 ff 25 2c b1 04 08
                                           jmp
                                                   *0x804b12c
80488a0:
                 68 50 00 00 00
80488a6:
                                           push
                                                   $0x50
80488ab:
                 e9 40 ff ff ff
                                                   80487f0 <_init+0x30>
                                           jmp
080488b0 <fwrite@plt>:
80488b0:
                 ff 25 30 b1 04 08
                                           jmp
                                                   *0x804b130
80488b6:
                 68 58 00 00 00
                                           push
                                                   $0x58
                                                   80487f0 < init+0x30>
80488bb:
                 e9 30 ff ff ff
                                           ami
080488c0 <bcopy@plt>:
80488c0: ff 25 34 b1 04 08
                                                   *0x804b134
                                           jmp
80488c6:
                 68 60 00 00 00
                                           push
                                                   $0x60
                 e9 20 ff ff ff
                                                   80487f0 <_init+0x30>
80488cb:
                                           jmp
080488d0 <strcpy@plt>:
80488d0: ff 25 38 b1 04 08
                                                   *0x804b138
                                           ami
80488d6:
                 68 68 00 00 00
                                           push
                                                   $0x68
80488db:
                 e9 10 ff ff ff
                                           jmp
                                                   80487f0 <_init+0x30>
080488e0 <getpid@plt>:
           ff 25 3c b1 04 08
80488e0:
                                                   *0x804b13c
                                           jmp
80488e6:
                 68 70 00 00 00
                                           push
                                                   $0x70
80488eb:
                 e9 00 ff ff ff
                                                   80487f0 < init+0x30>
                                           jmp
080488f0 <gethostname@plt>:
80488f0:
           ff 25 40 b1 04 08
                                           jmp
                                                   *0x804b140
                 68 78 00 00 00
80488f6:
                                           push
                                                   $0x78
80488fb:
                 e9 f0 fe ff ff
                                                   80487f0 <_init+0x30>
                                           jmp
08048900 <puts@plt>:
8048900:
                ff 25 44 b1 04 08
                                           ami
                                                   *0x804b144
                 68 80 00 00 00
8048906:
                                           push
                                                   $0x80
804890b:
                 e9 e0 fe ff ff
                                           jmp
                                                   80487f0 <_init+0x30>
08048910 <__gmon_start__@plt>:
8048910: ff 25 48 b1 04 08
                                                   *0x804b148
                                           jmp
                 68 88 00 00 00
8048916:
                                           push
                                                   $0x88
                 e9 d0 fe ff ff
                                                   80487f0 <_init+0x30>
804891b:
                                           jmp
08048920 <exit@plt>:
                 ff 25 4c b1 04 08
8048920:
                                           jmp
                                                   *0x804b14c
                 68 90 00 00 00
8048926:
                                           push
                                                   $0x90
                 e9 c0 fe ff ff
                                                   80487f0 <_init+0x30>
804892b:
                                           jmp
08048930 osrand@plt>:
                 ff 25 50 b1 04 08
8048930:
                                                   *0x804b150
                                           jmp
8048936:
                 68 98 00 00 00
                                           push
                                                   $0×98
                 e9 b0 fe ff ff
                                                   80487f0 <_init+0x30>
804893b:
                                           jmp
08048940 <mmap@plt>:
                ff 25 54 b1 04 08
8048940:
                                                   *0x804b154
                                           jmp
8048946:
                 68 a0 00 00 00
                                           push
                                                   $0xa0
804894b:
                 e9 a0 fe ff ff
                                                   80487f0 < init+0x30>
                                           jmp
```

```
08048950 <strlen@plt>:
                 ff 25 58 b1 04 08
                                                  *0x804b158
8048950:
                                          jmp
8048956:
                 68 a8 00 00 00
                                          push
                                                  $0xa8
804895b:
                e9 90 fe ff ff
                                          jmp
                                                  80487f0 <_init+0x30>
*0x804b15c
                                           jmp
                 68 b0 00 00 00
8048966:
                                          push
                                                  $0xb0
804896b:
                 e9 80 fe ff ff
                                                  80487f0 <_init+0x30>
                                          jmp
08048970 orite@plt>:
                ff 25 60 b1 04 08
8048970:
                                                  *0x804b160
                                           jmp
8048976:
                68 b8 00 00 00
                                           push
                                                  $0xb8
804897b:
                e9 70 fe ff ff
                                                  80487f0 <_init+0x30>
                                          jmp
08048980 <getopt@plt>:
             ff 25 64 b1 04 08
                                                  *0x804b164
8048980:
                                           jmp
8048986:
                 68 c0 00 00 00
                                           push
                                                  $0xc0
                e9 60 fe ff ff
804898b:
                                                  80487f0 <_init+0x30>
                                          jmp
08048990 <strcasecmp@plt>:
8048990:
             ff 25 68 b1 04 08
                                                  *0x804b168
                                          jmp
8048996:
                 68 c8 00 00 00
                                          push
                                                  $0xc8
                e9 50 fe ff ff
804899b:
                                                  80487f0 <_init+0x30>
                                          jmp
080489a0 <__isoc99_sscanf@plt>:
                                                  *0x804b16c
                ff 25 6c b1 04 08
80489a0:
                                           jmp
80489a6:
                 68 d0 00 00 00
                                           push
                                                  $0xd0
80489ab:
                 e9 40 fe ff ff
                                                  80487f0 <_init+0x30>
                                          jmp
080489b0 <memset@plt>:
                                                  *0x804b170
                ff 25 70 b1 04 08
80489b0:
                                           jmp
80489b6:
                 68 d8 00 00 00
                                          push
80489bb:
                e9 30 fe ff ff
                                          jmp
                                                  80487f0 <_init+0x30>
080489c0 <__errno_location@plt>:
80489c0:
                 ff 25 74 b1 04 08
                                           jmp
                                                  *0x804b174
                 68 e0 00 00 00
80489c6:
                                          push
                                                  $0xe0
80489cb:
                 e9 20 fe ff ff
                                                  80487f0 <_init+0x30>
                                           jmp
080489d0 <rand@plt>:
80489d0:
                 ff 25 78 b1 04 08
                                           jmp
                                                  *0x804b178
                 68 e8 00 00 00
80489d6:
                                           push
                                                  $0xe8
80489db:
                 e9 10 fe ff ff
                                           jmp
                                                  80487f0 <_init+0x30>
080489e0 <munmap@plt>:
                 ff 25 7c b1 04 08
80489e0:
                                                  *0x804b17c
                                           jmp
80489e6:
                 68 f0 00 00 00
                                          push
80489eb:
                 e9 00 fe ff ff
                                                  80487f0 < init+0x30>
                                          ami
080489f0 oprintf@plt>:
80489f0:
                 ff 25 80 b1 04 08
                                                  *0x804b180
                                          jmp
80489f6:
                 68 f8 00 00 00
                                          push
                                                  $0xf8
                 e9 f0 fd ff ff
                                                  80487f0 <_init+0x30>
80489fb:
                                           jmp
08048a00 <socket@plt>:
                 ff 25 84 b1 04 08
8048a00:
                                                  *0x804b184
                                          ami
8048a06:
                 68 00 01 00 00
                                           push
                                                  $0×100
8048a0b:
                 e9 e0 fd ff ff
                                           jmp
                                                  80487f0 <_init+0x30>
08048a10 <random@plt>:
                 ff 25 88 b1 04 08
8048a10:
                                                  *0x804b188
                                           jmp
8048a16:
                 68 08 01 00 00
                                          push
                                                  $0x108
                 e9 d0 fd ff ff
8048a1b:
                                           jmp
                                                  80487f0 <_init+0x30>
08048a20 <gethostbyname@plt>:
8048a20:
                 ff 25 8c b1 04 08
                                          jmp
                                                  *0x804b18c
                 68 10 01 00 00
8048a26:
                                          push
                                                  $0×110
8048a2b:
                                                  80487f0 <_init+0x30>
                 e9 c0 fd ff ff
                                           jmp
08048a30 <connect@plt>:
                 ff 25 90 b1 04 08
8048a30:
                                                  *0x804b190
                                          ami
                 68 18 01 00 00
8048a36:
                                           push
                                                  $0x118
8048a3b:
                 e9 b0 fd ff ff
                                           jmp
                                                  80487f0 <_init+0x30>
```

```
08048a40 <close@plt>:
                 ff 25 94 b1 04 08
 8048a40:
                                             jmp
                                                    *0x804h194
 8048a46:
                 68 20 01 00 00
                                             push
                                                    $0x120
 8048a4b:
                 e9 a0 fd ff ff
                                                    80487f0 <_init+0x30>
                                            jmp
08048a50 <calloc@plt>:
                  ff 25 98 b1 04 08
 8048a50:
                                             jmp
                                                    *0x804b198
 8048a56:
                 68 28 01 00 00
                                            push
                                                    $0x128
 8048a5b:
                 e9 90 fd ff ff
                                                    80487f0 < init+0x30>
                                            jmp
Disassembly of section .text:
08048a60 <_start>:
 8048a60:
                 31 ed
                                            xor
                                                    %ebp,%ebp
 8048a62:
                  5e
                                            pop
                                                    %esi
 8048a63:
                 89 e1
                                                    %esp,%ecx
                                            mov
 8048a65:
                 83 e4 f0
                                                    $0xfffffff0,%esp
                                            and
 8048a68:
                 50
                                             push
                                                    %eax
 8048a69:
                 54
                                            push
                                                    %esp
 8048a6a:
                  52
                                            push
                                                    %edx
                 68 c0 a2 04 08
 8048a6b:
                                                    $0x804a2c0
                                             push
 8048a70:
                 68 50 a2 04 08
                                            push
                                                    $0x804a250
 8048a75:
                 51
                                            push
                                                    %ecx
 8048a76:
                 56
                                            push
                                                    %esi
 8048a77:
                 68 d8 90 04 08
                                                    $0x80490d8
                                            push
 8048a7c:
                 e8 df fe ff ff
                                             call
                                                    8048960 <__libc_start_main@plt>
 8048a81:
                  f4
                                            hlt
                 66 90
 8048a82:
                                            xchq
                                                    %ax,%ax
 8048a84:
                 66 90
                                            xchg
                                                    %ax,%ax
 8048a86:
                 66 90
                                            xchg
                                                    %ax,%ax
                 66 90
 8048a88:
                                            xchg
                                                    %ax,%ax
                 66 90
                                            xchg
 8048a8a:
                                                    %ax,%ax
 8048a8c:
                 66 90
                                             xchg
                                                    %ax,%ax
 8048a8e:
                 66 90
                                            xchg
                                                    %ax,%ax
08048a90 <__x86.get_pc_thunk.bx>:
 8048a90:
                 8b 1c 24
                                            moν
                                                    (%esp),%ebx
 8048a93:
                 с3
                                             ret
                 66 90
 8048a94:
                                            xchq
                                                    %ax,%ax
 8048a96:
                 66 90
                                                    %ax,%ax
                                            xchg
 8048a98:
                 66 90
                                            xchg
                                                    %ax,%ax
                                                    %ax,%ax
 8048a9a:
                 66 90
                                            xchg
                 66 90
                                            xchg
                                                    %ax,%ax
 8048a9c:
                 66 90
                                                    %ax,%ax
 8048a9e:
                                            xchg
08048aa0 <deregister tm clones>:
                 b8 cb b1 04 08
                                                    $0x804b1cb,%eax
 8048aa0:
                                            mov
 8048aa5:
                 2d c8 b1 04 08
                                                    $0x804b1c8,%eax
                                             sub
 8048aaa:
                 83 f8 06
                                             cmp
                                                    $0x6,%eax
 8048aad:
                 76 1a
                                            jbe
                                                    8048ac9 <deregister_tm_clones+0x29>
                 b8 00 00 00 00
 8048aaf:
                                            mov
                                                    $0x0,%eax
 8048ab4:
                 85 c0
                                             test
                                                    %eax,%eax
 8048ab6:
                 74 11
                                                    8048ac9 <deregister_tm_clones+0x29>
                                            jе
 8048ab8:
                 55
                                            push
                                                    %ebp
                 89 e5
                                                    %esp,%ebp
 8048ab9:
                                            mov
 8048abb:
                 83 ec 14
                                             sub
                                                    $0x14,%esp
 8048abe:
                 68 c8 b1 04 08
                                                    $0x804b1c8
                                            push
 8048ac3:
                 ff d0
                                            call
                                                    *%eax
                                            add
 8048ac5:
                 83 c4 10
                                                    $0x10,%esp
 8048ac8:
                  с9
                                             leave
 8048ac9:
                  f3 c3
                                             repz ret
 8048acb:
                 90
                                            nop
                 8d 74 26 00
                                                    0x0(%esi,%eiz,1),%esi
 8048acc:
                                             lea
08048ad0 <register_tm_clones>:
                 b8 c8 b1 04 08
                                                    $0x804b1c8,%eax
 8048ad0:
                                            mov
 8048ad5:
                 2d c8 b1 04 08
                                            sub
                                                    $0x804b1c8,%eax
 8048ada:
                 c1 f8 02
                                                    $0x2,%eax
                                            sar
 8048add:
                 89 c2
                                                    %eax,%edx
                                            mov
 8048adf:
                 c1 ea 1f
                                                    $0x1f,%edx
                                             shr
                 01 d0
 8048ae2:
                                            add
                                                    %edx,%eax
 8048ae4:
                 d1 f8
                                            sar
                                                    %eax
 8048ae6:
                 74 1b
                                            jе
                                                    8048b03 <register_tm_clones+0x33>
 8048ae8:
                 ba 00 00 00 00
                                                    $0x0,%edx
                                            mov
 8048aed:
                 85 d2
                                             test
                                                    %edx,%edx
 8048aef:
                 74 12
                                            jе
                                                    8048b03 <register_tm_clones+0x33>
```

```
8048af1:
                  55
                                             push
                                                     %ebp
                  89 e5
                                                     %esp,%ebp
 8048af2:
                                             mov
 8048af4:
                  83 ec 10
                                             sub
                                                     $0x10,%esp
 8048af7:
                  50
                                             push
                                                     %eax
 8048af8:
                  68 c8 b1 04 08
                                             push
                                                     $0x804b1c8
                  ff d2
 8048afd:
                                             call
                                                     *%edx
 8048aff:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048b02:
                  с9
                                             leave
 8048b03:
                  f3 c3
                                             repz ret
                                                     0x0(%esi,%eiz,1),%esi
 8048b05:
                  8d 74 26 00
                                             lea
 8048b09:
                  8d bc 27 00 00 00 00
                                             lea
                                                     0x0(%edi,%eiz,1),%edi
08048b10 <__do_global_dtors_aux>:
                                                     $0x0,0x804b20c
 8048b10:
                  80 3d 0c b2 04 08 00
                                             cmpb
 8048b17:
                  75 13
                                                     8048b2c <__do_global_dtors_aux+0x1c>
                                             jne
 8048b19:
                  55
                                             push
                                                     %ebp
 8048b1a:
                  89 e5
                                                     %esp,%ebp
                                             mov
 8048b1c:
                  83 ec 08
                                             sub
                                                     $0x8,%esp
 8048b1f:
                  e8
                     7c ff ff ff
                                                     8048aa0 <deregister_tm_clones>
                                             call
                  c6 05 0c b2 04 08 01
                                                     $0x1,0x804b20c
 8048b24:
                                             movb
 8048b2b:
                  с9
                                             leave
 8048b2c:
                  f3 c3
                                             repz ret
 8048b2e:
                  66 90
                                             xchg
                                                     %ax,%ax
08048b30 <frame_dummy>:
 8048b30:
                  b8 08 b0 04 08
                                             mov
                                                     $0x804b008,%eax
 8048b35:
                  8b 10
                                             mov
                                                     (%eax),%edx
 8048b37:
                                                     %edx,%edx
                  85 d2
                                             test
 8048b39:
                  75 05
                                             jne
                                                     8048b40 < frame_dummy + 0 \times 10 >
 8048b3b:
                  eb 93
                                                     8048ad0 <register_tm_clones>
                                             jmp
                                                     0x0(%esi),%esi
                  8d 76 00
 8048b3d:
                                             lea
                  ba 00 00 00 00
 8048b40:
                                                     $0x0,%edx
                                             mov
                  85 d2
                                                     %edx,%edx
 8048b45:
                                             test
 8048b47:
                  74 f2
                                                     8048b3b <frame_dummy+0xb>
                                             jе
 8048b49:
                  55
                                             push
                                                     %ebp
 8048b4a:
                  89 e5
                                                     %esp,%ebp
                                             mov
 8048b4c:
                  83 ec 14
                                             sub
                                                     $0x14,%esp
 8048b4f:
                  50
                                             push
                                                     %eax
 8048b50:
                  ff d2
                                             call
                                                     *%edx
 8048b52:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048b55:
                  c9
                                             leave
 8048b56:
                  e9 75 ff ff ff
                                             jmp
                                                     8048ad0 <register_tm_clones>
08048b5b <smoke>:
                  55
 8048b5b:
                                             push
                                                     %ebp
 8048b5c:
                  89 e5
                                             mov
                                                     %esp,%ebp
 8048b5e:
                                                     $0x8,%esp
                  83 ec 08
                                             sub
 8048b61:
                                                     $0xc,%esp
                  83 ec 0c
                                             sub
 8048b64:
                  68 e0 a2 04 08
                                             push
                                                     $0x804a2e0
                  e8 92 fd ff ff
                                                     8048900 <puts@plt>
 8048b69:
                                             call
 8048b6e:
                  83 c4 10
                                             bhs
                                                     $0x10,%esp
 8048b71:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8048b74:
                  6a 00
                                                     $0x0
                                             push
 8048b76:
                  e8 e5 08 00 00
                                             call
                                                     8049460 <validate>
                  83 c4 10
 8048b7b:
                                             add
                                                     $0x10,%esp
 8048b7e:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8048b81:
                  6a 00
                                             push
                                                     $0x0
                  e8 98 fd ff ff
 8048b83:
                                                     8048920 <exit@plt>
                                             call
08048b88 <fizz>:
 8048b88:
                  55
                                             push
                                                     %ebp
 8048b89:
                  89 e5
                                                     %esp,%ebp
                                             mov
 8048b8b:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
                  8b 55 08
 8048b8e:
                                             mov
                                                     0x8(%ebp),%edx
 8048b91:
                  a1 20 b2 04 08
                                             mov
                                                     0x804b220,%eax
 8048b96:
                  39 c2
                                                     %eax,%edx
                                             cmp
 8048b98:
                  75 22
                                             jne
                                                     8048bbc <fizz+0x34>
 8048b9a:
                  83
                    ec 08
                                                     $0x8,%esp
                                             sub
 8048b9d:
                  ff
                    75 08
                                             pushl
                                                     0x8(%ebp)
                  68 fb a2 04 08
                                                     $0x804a2fb
 8048ha0:
                                             push
                  e8 86 fc ff ff
 8048ba5:
                                             call
                                                     8048830 <printf@plt>
 8048baa:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048bad:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8048bb0:
                 6a 01
                                             push
                                                     $0x1
                  e8 a9 08 00 00
 8048bb2:
                                             call
                                                     8049460 <validate>
 8048bb7:
                  83 c4 10
                                             add
                                                     $0x10,%esp
```

```
8048bba:
                  eb 13
                                                     8048bcf <fizz+0x47>
                                             imp
                  83 ec 08
ff 75 08
 8048bbc:
                                             sub
                                                     $0x8,%esp
 8048bbf:
                                             pushl
                                                     0x8(%ebp)
 8048bc2:
                  68 1c a3 04 08
                                                     $0x804a31c
                                             push
 8048bc7:
                  e8 64 fc ff ff
                                             call
                                                     8048830 <printf@plt>
                  83 c4 10
                                                     $0x10,%esp
 8048bcc:
                                             add
 8048bcf:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8048bd2:
                  6a 00
                                             push
                                                     $0x0
                  e8 47 fd ff ff
 8048bd4:
                                             call
                                                     8048920 <exit@plt>
08048bd9 <bang>:
 8048bd9:
                                             push
                                                     %ebp
                  89 e5
 8048bda:
                                             mov
                                                     %esp,%ebp
 8048bdc:
                  83 ec 08
                                             sub
                                                     $0x8,%esp
 8048bdf:
                  a1 28 b2 04 08
                                                     0x804b228, %eax
                                             mov
 8048be4:
                  89 c2
                                                     %eax,%edx
                                             mov
 8048be6:
                  a1 20 b2 04 08
                                                     0x804b220, %eax
                                             mov
 8048beb:
                  39 c2
                                             cmp
                                                     %eax,%edx
 8048bed:
                  75
                    25
                                                     8048c14 <bang+0x3b>
                                             jne
                  a1 28 b2 04 08
                                                     0x804b228,%eax
 8048bef:
                                             mov
 8048bf4:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
 8048bf7:
                  50
                                             push
                                                     %eax
 8048bf8:
                  68 3c a3 04 08
                                                     $0x804a33c
                                             push
                  e8 2e fc ff ff
83 c4 10
 8048bfd:
                                             call
                                                     8048830 <printf@plt>
 8048c02:
                                                     $0x10,%esp
                                             add
 8048c05:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8048c08:
                  6a 02
                                             push
                                                     $0x2
                                                     8049460 <validate>
 8048c0a:
                  e8 51 08 00 00
                                             call
 8048c0f:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048c12:
                  eb 16
                                                     8048c2a <bang+0x51>
                                             jmp
                  a1 28 b2 04 08
                                                     0x804b228,%eax
 8048c14:
                                             mov
                  83 ec 08
 8048c19:
                                                     $0x8,%esp
                                             sub
 8048c1c:
                  50
                                             push
                                                     %eax
 8048c1d:
                  68 61 a3 04 08
                                                     $0x804a361
                                             push
                  e8 09 fc ff ff
 8048c22:
                                             call
                                                     8048830 <printf@plt>
                  83 c4 10
 8048c27:
                                             add
                                                     $0x10,%esp
 8048c2a:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8048c2d:
                  6a 00
                                             push
                                                     $0x0
                  e8 ec fc ff ff
 8048c2f:
                                             call
                                                     8048920 <exit@plt>
08048c34 <test>:
                  55
 8048c34:
                                             push
                                                     %ebp
 8048c35:
                  89 e5
                                                     %esp,%ebp
                                             mov
                                                     $0x18,%esp
                  83 ec 18
 8048c37:
                                             sub
 8048c3a:
                  e8 7b 04 00 00
                                             call
                                                     80490ba <uniqueval>
 8048c3f:
                  89 45 f0
                                                     %eax,-0x10(%ebp)
                                             mov
 8048c42:
                  e8 66 00 00 00
                                                     8048cad <getbuf>
                                             call
                  89 45 f4
                                                     %eax,-0xc(%ebp)
 8048c47:
                                             mov
 8048c4a:
                  e8 6b 04 00 00
                                             call
                                                     80490ba <uniqueval>
                  89 c2
 8048c4f:
                                                     %eax,%edx
                                             mov
                  8b 45 f0
                                                     -0x10(%ebp),%eax
 8048c51:
                                             mov
 8048c54:
                  39 c2
                                             cmp
                                                     %eax,%edx
 8048c56:
                  74 12
                                                     8048c6a <test+0x36>
                                             jе
 8048c58:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
                  68 80 a3 04 08
                                                     $0x804a380
 8048c5b:
                                             push
 8048c60:
                  e8 9b fc ff ff
                                             call
                                                     8048900 <puts@plt>
 8048c65:
                  83 c4 10
                                                     $0x10,%esp
                                             add
 8048c68:
                  eb 41
                                                     8048cab <test+0x77>
                                             ami
 8048c6a:
                  8b 55 f4
                                                     -0xc(%ebp), %edx
                                             mov
 8048c6d:
                  a1 20 b2 04 08
                                                     0x804b220,%eax
                                             mov
 8048c72:
                  39 c2
                                             cmp
                                                     %eax,%edx
                  75 22
 8048c74:
                                             jne
                                                     8048c98 <test+0x64>
 8048c76:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
                  ff 75 f4
 8048c79:
                                             pushl
                                                     -0xc(%ebp)
                  68 a9 a3 04 08
 8048c7c:
                                             push
                                                     $0x804a3a9
                  e8 aa fb ff ff
                                                     8048830 <printf@plt>
 8048c81:
                                             call
 8048c86:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048c89:
                  83 ec 0c
                                                     $0xc,%esp
                                             sub
 8048c8c:
                  6a 03
                                                     $0x3
                                             push
                  e8 cd 07 00 00
                                             call
                                                     8049460 <validate>
 8048c8e:
                  83 c4 10
 8048c93:
                                             add
                                                     $0x10,%esp
 8048c96:
                  eb 13
                                             jmp
                                                     8048cab <test+0x77>
                                                     $0x8,%esp
-0xc(%ebp)
 8048c98:
                  83 ec 08
                                             sub
                  ff 75 f4
 8048c9b:
                                             pushl
 8048c9e:
                  68 c6 a3 04 08
                                             push
                                                     $0x804a3c6
 8048ca3:
                  e8 88 fb ff ff
                                                     8048830 <printf@plt>
                                             call
```

```
8048ca8:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048cab:
                  c9
                                              leave
 8048cac:
                  c3
                                              ret
08048cad <getbuf>: 8048cad: 5
                  55
                                             push
                                                     %ebp
                                                     %esp,%ebp
 8048cae:
                  89 e5
                                              mov
 8048cb0:
                  83 ec 28
                                                     $0x28,%esp
                                              sub
 8048cb3:
                  83 ec 0c
                                                     $0xc,%esp
                                             sub
 8048cb6:
                  8d 45 d8
                                                     <mark>-0x28(%ebp),</mark>%eax
                                              lea
 8048cb9:
                  50
                                              push
                                                     %eax
                  e8 3e 01 00 00
                                                     8048dfd <Gets>
 8048cba:
                                             call
 8048chf:
                  83 c4 10
                                             add
                                                     $0x10,%esp
                  b8 01 00 00 00
 8048cc2:
                                             moν
                                                     $0x1,%eax
 8048cc7:
                  с9
                                              leave
 8048cc8:
                  с3
                                              ret
08048cc9 <getbufn>:
 8048cc9:
                                              push
                                                     %ebp
 8048cca:
                  89 e5
                                             mov
                                                     %esp,%ebp
                                                     $0x208,%esp
                  81 ec 08 02 00 00
                                              suh
 8048ccc:
 8048cd2:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 8048cd5:
                  8d 85 f8 fd ff ff
                                                     -0x208(%ebp),%eax
                                              lea
 8048cdb:
                  50
                                              push
                                                     %eax
                  e8 1c 01 00 00
 8048cdc:
                                                     8048dfd <Gets>
                                              call
 8048ce1:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8048ce4:
                  b8 01 00 00 00
                                             mov
                                                     $0x1,%eax
 8048ce9:
                                              leave
                  c9
 8048cea:
                  с3
                                              ret
08048ceb <testn>:
 8048ceb:
                  55
                                             nush
                                                     %ebp
                  89 e5
                                                     %esp,%ebp
 8048cec:
                                             moν
 8048cee:
                  83 ec 18
                                                     $0x18,%esp
                                              sub
 8048cf1:
                  c7 45 f0 ef be ad de
                                             movl
                                                     $0xdeadbeef,-0x10(%ebp)
 8048cf8:
                  e8 cc ff ff ff
                                                     8048cc9 <getbufn>
                                             call
 8048cfd:
                  89 45 f4
                                             mov
                                                     %eax,-0xc(%ebp)
                                                     -0x10(%ebp),%eax
$0xdeadbeef,%eax
 8048d00:
                  8b 45 f0
                                             mov
                  3d ef be ad de
 8048d03:
                                             cmp
                                                     8048d1c <testn+0x31>
 8048d08:
                  74 12
                                              jе
                  83 ec 0c
 8048d0a:
                                              sub
                                                     $0xc,%esp
 8048d0d:
                  68 80 a3 04 08
                                             push
                                                     $0x804a380
 8048d12:
                  e8 e9 fb ff ff
                                                     8048900 <puts@plt>
                                              call
                  83 c4 10
 8048d17:
                                                     $0x10,%esp
                                             add
 8048d1a:
                  eb 41
                                              jmp
                                                     8048d5d <testn+0x72>
 8048d1c:
                  8b 55 f4
                                                     -0xc(%ebp),%edx
                                             mov
 8048d1f:
                  a1 20 b2 04 08
                                                     0x804b220,%eax
                                             mov
 8048d24:
                  39 c2
                                              cmp
                                                     %eax,%edx
                  75 22
 8048d26:
                                              jne
                                                     8048d4a <testn+0x5f>
                  83 ec 08
 8048d28:
                                             sub
                                                     $0x8,%esp
                  ff 75 f4
 8048d2b:
                                                     -0xc(%ebp)
                                              pushl
                  68 e4 a3 04 08
 8048d2e:
                                              push
                                                     $0x804a3e4
 8048d33:
                  e8 f8 fa ff ff
                                              call
                                                     8048830 <printf@plt>
 8048d38:
                  83 c4 10
                                             add
                                                     $0x10,%esp
                  83 ec 0c
 8048d3b:
                                                     $0xc,%esp
                                             sub
 8048d3e:
                  6a 04
                                              push
                                                     $0x4
 8048d40:
                  e8 1b 07 00 00
                                                     8049460 <validate>
                                              call
 8048d45:
                  83 c4 10
                                                     $0x10,%esp
                                             add
                  eb 13
 8048d48:
                                                     8048d5d <testn+0x72>
                                              jmp
 8048d4a:
                  83 ec 08
                                              sub
                                                     $0x8,%esp
 8048d4d:
                     75 f4
                                                     -0xc(%ebp)
                                             pushl
 8048d50:
                  68 04 a4 04 08
                                             push
                                                     $0x804a404
 8048d55:
                  e8 d6 fa ff ff
                                                     8048830 <printf@plt>
                                              call
 8048d5a:
                  83 c4 10
                                              add
                                                     $0x10,%esp
 8048d5d:
                  с9
                                              leave
 8048d5e:
                  c3
                                              ret
08048d5f <save_char>:
 8048d5f:
                  55
                                             push
                                                     %ebp
 8048460:
                  89 e5
                                                     %esp,%ebp
                                             mov
                  83 ec 04
                                                     $0x4,%esp
 8048d62:
                                              sub
 8048d65:
                  8b 45 08
                                             mov
                                                     0x8(%ebp),%eax
                  88 45 fc
 8048d68:
                                                     %al,-0x4(%ebp)
                                             mov
                                                     0x804b22c,%eax
 8048d6b:
                  a1 2c b2 04 08
                                             mov
 8048d70:
                  3d ff 03 00 00
                                              cmp
                                                     $0x3ff,%eax
 8048d75:
                  7f 6c
                                                     8048de3 <save_char+0x84>
                                              jg
```

```
8048d77:
                  8b 15 2c b2 04 08
                                                    0x804b22c,%edx
                                            mov
                  89 d0
 8048d7d:
                                                    %edx,%eax
                                            mov
 8048d7f:
                 01 c0
                                            add
                                                    %eax,%eax
 8048d81:
                                                    %eax,%edx
                  01 c2
                                             add
 8048d83:
                  0f b6 45 fc
                                            movzbl -0x4(%ebp),%eax
                  c0 f8 04
 8048d87:
                                             sar
                                                    $0x4,%al
 8048d8a:
                  0f be c0
                                             movsbl %al,%eax
 8048d8d:
                  83 e0 0f
                                                    $0xf,%eax
                                             and
                                            movzbl 0x804b1a4(%eax),%eax
 8048d90:
                  0f b6 80 a4 b1 04 08
 8048d97:
                  88 82 80 c2 04 08
                                                    %al,0x804c280(%edx)
                                            mov
 8048d9d:
                  8b 15 2c b2 04 08
                                            mov
                                                    0x804b22c,%edx
                  89 d0
 8048da3:
                                                    %edx,%eax
                                            mov
                                                    %eax,%eax
%edx,%eax
                  01 c0
 8048da5:
                                             add
                  01 d0
 8048da7:
                                             add
 8048da9:
                  8d 50 01
                                                    0x1(%eax),%edx
                                             lea
 8048dac:
                  0f be 45 fc
                                            movsbl -0x4(%ebp),%eax
                  83 e0 0f
 8048db0:
                                            and
                                                    $0xf,%eax
                  0f b6 80 a4 b1 04 08
                                            movzbl 0x804b1a4(%eax),%eax
 8048db3:
 8048dba:
                  88 82 80 c2 04 08
                                                    %al,0x804c280(%edx)
                                             mov
                  8b 15 2c b2 04 08
                                                    0x804b22c,%edx
 8048dc0:
                                            mov
                                                    %edx,%eax
                  89 d0
 8048dc6:
                                             mov
 8048dc8:
                 01 c0
                                             add
                                                    %eax,%eax
 8048dca:
                  01 d0
                                                    %edx,%eax
                                             add
 8048dcc:
                  83 c0 02
                                                    $0x2,%eax
                                             add
 8048dcf:
                    80 80 c2 04 08 20
                                                    $0x20,0x804c280(%eax)
                  с6
                                            movb
 8048dd6:
                  a1 2c b2 04 08
                                                    0x804b22c,%eax
                                             mov
 8048ddb:
                  83 c0 01
                                             add
                                                    $0x1,%eax
                 a3 2c b2 04 08
 8048dde:
                                                    %eax,0x804b22c
                                            mov
 8048de3:
                  с9
                                             leave
 8048de4:
                  с3
                                             ret
08048de5 <save_term>:
 8048de5:
                  55
                                             push
                                                    %ebp
 8048de6:
                  89 e5
                                                    %esp,%ebp
                                             mov
 8048de8:
                 8b 15 2c b2 04 08
                                                    0x804b22c,%edx
                                             mov
 8048dee:
                 89 dø
                                            mov
                                                    %edx,%eax
 8048df0:
                  01 c0
                                             add
                                                    %eax,%eax
 8048df2:
                  01 d0
                                             add
                                                    %edx,%eax
                  c6 80 80 c2 04 08 00
                                                    $0x0,0x804c280(%eax)
 8048df4:
                                            movb
 8048dfb:
                  5d
                                             pop
                                                    %ebp
 8048dfc:
                  c3
                                             ret
08048dfd <Gets>:
                  55
 8048dfd:
                                             push
                                                    %ebp
 8048dfe:
                  89 e5
                                             mov
                                                    %esp,%ebp
 8048e00:
                  83 ec 18
                                                    $0x18,%esp
                                             sub
 8048e03:
                  8b 45 08
                                                    0x8(%ebp),%eax
                                            mov
                  89 45 f4
                                                    %eax,-0xc(%ebp)
 8048e06:
                                             mov
                                             movl
 8048e09:
                  c7 05 2c b2 04 08 00
                                                    $0x0,0x804b22c
                  00 00 00
 8048e10:
 8048e13:
                  eb 1d
                                                    8048e32 <Gets+0x35>
                                             jmp
                  8b 45 f4
 8048e15:
                                             mov
                                                    -0xc(%ebp),%eax
 8048e18:
                  8d 50 01
                                                    0x1(%eax),%edx
                                             lea
 8048e1b:
                  89 55 f4
                                            mov
                                                    %edx,-0xc(%ebp)
                                                    -0x10(%ebp),%edx
 8048e1e:
                  8b 55 f0
                                            mov
 8048e21:
                  88 10
                                             mov
                                                    %dl,(%eax)
 8048e23:
                  8b 45 f0
                                                    -0x10(%ebp),%eax
                                             mov
 8048e26:
                  0f be c0
                                            movsbl %al,%eax
                  50
 8048e29:
                                             push
                                                    %eax
 8048e2a:
                  e8 30 ff ff ff
                                             call
                                                    8048d5f <save_char>
                  83 c4 04
 8048e2f:
                                             add
                                                    $0x4,%esp
 8048e32:
                  a1 1c b2 04 08
                                                    0x804b21c,%eax
                                            mov
 8048e37:
                  83 ec 0c
                                                    $0xc,%esp
                                             sub
 8048e3a:
                  50
                                             push
                                                    %eax
 8048e3b:
                  e8 50 fa ff ff
                                             call
                                                    8048890 <_IO_getc@plt>
                  83 c4 10
 8048e40:
                                                    $0x10,%esp
                                             add
                                                    %eax,-0x10(%ebp)
                  89 45 f0
 8048e43:
                                             \text{mov}
 8048e46:
                 83 7d f0 ff
                                                    $0xffffffff,-0x10(%ebp)
                                             cmpl
                                                    8048e52 <Gets+0x55>
 8048e4a:
                  74 06
                                             jе
 8048e4c:
                  83 7d f0 0a
                                                    $0xa,-0x10(%ebp)
                                             cmpl
                  75 c3
 8048e50:
                                             jne
                                                    8048e15 <Gets+0x18>
 8048e52:
                  8b 45 f4
                                             mov
                                                    -0xc(%ebp),%eax
                                                    0x1(%eax),%edx
 8048e55:
                  8d 50 01
                                             lea
 8048e58:
                 89 55 f4
                                                    %edx,-0xc(%ebp)
                                            mov
 8048e5b:
                  c6 00 00
                                             movb
                                                    $0x0,(%eax)
 8048e5e:
                  e8 82 ff ff ff
                                                    8048de5 <save_term>
                                             call
```

```
0x8(%ebp),%eax
 8048e63:
                 8b 45 08
                                            mov
 8048e66:
                 c9
                                             leave
 8048e67:
                  c3
                                             ret
08048e68 <usage>:
                 55
 8048e68:
                                             push
                                                    %ebp
                                                    %esp,%ebp
 8048e69:
                 89 e5
                                             moν
                                                    $0x8,%esp
$0x8,%esp
 8048e6b:
                 83 ec 08
                                             sub
 8048e6e:
                 83 ec 08
                                            sub
 8048e71:
                 ff 75 08
                                             pushl
                                                    0x8(%ebp)
 8048e74:
                 68 20 a4 04 08
                                             push
                                                    $0x804a420
 8048e79:
                 e8 b2 f9 ff ff
                                                    8048830 <printf@plt>
                                             call
                 83 c4 10
 8048e7e:
                                            add
                                                    $0x10,%esp
 8048e81:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048e84:
                 68 3e a4 04 08
                                                    $0x804a43e
                                             push
 8048e89:
                 e8 72 fa ff ff
                                             call
                                                    8048900 <puts@plt>
                 83 c4 10
 8048e8e:
                                                    $0x10,%esp
                                            bbs
 8048e91:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048e94:
                 68 54 a4 04 08
                                                    $0x804a454
                                             push
                 e8 62 fa ff ff
 8048e99:
                                             call
                                                    8048900 <puts@plt>
                 83 c4 10
 8048e9e:
                                            add
                                                    $0x10,%esp
 8048ea1:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048ea4:
                 68 70 a4 04 08
                                                    $0x804a470
                                            push
 8048ea9:
                 e8 52 fa ff ff
                                             call
                                                    8048900 <puts@plt>
                 83 c4 10
 8048eae:
                                                    $0x10,%esp
                                            add
 8048eb1:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048eb4:
                 68 ac a4 04 08
                                             push
                                                    $0x804a4ac
                 e8 42 fa ff ff
 8048eb9:
                                             call
                                                    8048900 <puts@plt>
 8048ebe:
                 83 c4 10
                                             add
                                                    $0x10,%esp
 8048ec1:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048ec4:
                 6a 00
                                             push
                                                    $0x0
 8048ec6:
                 e8 55 fa ff ff
                                                    8048920 <exit@plt>
                                             call
08048ecb <bushandler>:
 8048ecb:
                 55
                                             push
                                                    %ebp
 8048ecc:
                 89 e5
                                                    %esp,%ebp
                                            mov
 8048ece:
                 83 ec 08
                                             sub
                                                    $0x8,%esp
 8048ed1:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
                 68 d4 a4 04 08
                                                    $0x804a4d4
 8048ed4:
                                            push
                 e8 22 fa ff ff
 8048ed9:
                                                    8048900 <puts@plt>
                                             call
                 83 c4 10
 8048ede:
                                            add
                                                    $0x10,%esp
 8048ee1:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048ee4:
                 68 f4 a4 04 08
                                                    $0x804a4f4
                                             push
                 e8 12 fa ff ff
 8048ee9:
                                                    8048900 <puts@plt>
                                             call
 8048eee:
                 83 c4 10
                                             add
                                                    $0x10,%esp
 8048ef1:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048ef4:
                 6a 00
                                             push
                                                    $0×0
                 e8 25 fa ff ff
                                                    8048920 <exit@plt>
 8048ef6:
                                             call
08048efb <seghandler>:
 8048efb:
                                                    %ebp
                 55
                                             push
 8048efc:
                 89 e5
                                                    %esp,%ebp
                                            mov
 8048efe:
                 83 ec 08
                                                    $0x8,%esp
                                             sub
                                                    $0xc,%esp
$0x804a50c
 8048f01:
                 83 ec 0c
                                             sub
                 68 0c a5 04 08
 8048f04:
                                            push
 8048f09:
                 e8 f2 f9 ff ff
                                             call
                                                    8048900 <puts@plt>
 8048f0e:
                 83 c4 10
                                                    $0x10,%esp
                                            add
 8048f11:
                 83 ec 0c
                                                    $0xc.%esp
                                            sub
                 68 f4 a4 04 08
                                                    $0x804a4f4
 8048f14:
                                             push
                 e8 e2 f9 ff ff
 8048f19:
                                             call
                                                    8048900 <puts@plt>
 8048f1e:
                 83 c4 10
                                            add
                                                    $0x10,%esp
 8048f21:
                 83 ec 0c
                                                    $0xc,%esp
                                             sub
 8048f24 ·
                 6a 00
                                             push
                                                    $0x0
                 e8 f5 f9 ff ff
 8048f26:
                                             call
                                                    8048920 <exit@plt>
08048f2b <illegalhandler>:
 8048f2b:
                 55
                                             push
                                                    %ebp
 8048f2c:
                 89 e5
                                                    %esp,%ebp
                                             mov
 8048f2e:
                 83 ec 08
                                                    $0x8,%esp
                                            sub
                                                    $0xc,%esp
                 83 ec 0c
68 34 a5 04 08
 8048f31:
                                             sub
                                                    $0x804a534
 8048f34:
                                             push
 8048f39:
                 e8 c2 f9 ff ff
                                             call
                                                    8048900 <puts@plt>
 8048f3e:
                 83 c4 10
                                            add
                                                    $0x10,%esp
 8048f41:
                 83 ec 0c
                                                    $0xc,%esp
                                             sub
                 68 f4 a4 04 08
                                                    $0x804a4f4
 8048f44:
                                             push
 8048f49:
                 e8 b2 f9 ff ff
                                                    8048900 <puts@plt>
                                             call
```

```
8048f4e:
                 83 c4 10
                                             add
                                                    $0x10,%esp
 8048f51:
                  83 ec 0c
                                             suh
                                                    $0xc,%esp
 8048f54:
                 6a 00
                                             push
                                                    $0x0
 8048f56:
                 e8 c5 f9 ff ff
                                                    8048920 <exit@plt>
                                             call
08048f5b <launch>:
 8048f5b:
                  55
                                             push
                                                    %ebp
 8048f5c:
                  89 e5
                                                    %esp,%ebp
                                             mov
 8048f5e:
                 83 ec 58
                                             sub
                                                    $0x58,%esp
 8048f61:
                                                    $0x0,-0xc(%ebp)
                  c7 45 f4 00 00 00 00
                                             movl
 8048f68:
                  8d 45 b0
                                             lea
                                                    -0x50(%ebp),%eax
                  25 f0 3f 00 00
 8048f6b:
                                             and
                                                    $0x3ff0,%eax
                                                    %eax,-0xc(%ebp)
                  89 45 f4
 8048f70:
                                             mov
 8048f73:
                 8b 55 0c
                                             mov
                                                    0xc(%ebp),%edx
 8048f76:
                  8b 45 f4
                                                    -0xc(%ebp),%eax
                                             mov
 8048f79:
                  01 d0
                                             add
                                                    %edx,%eax
 8048f7b:
                  8d 50 0f
                                                    0xf(%eax),%edx
                                             lea
                  b8 10 00 00 00
 8048f7e:
                                             \text{mov}
                                                    $0x10,%eax
 8048f83:
                  83 e8 01
                                                    $0x1,%eax
                                             sub
                  01 d0
                                                    %edx,%eax
 8048f86:
                                             add
                  b9 10 00 00 00
 8048f88:
                                                    $0x10,%ecx
                                             mov
                  ba 00 00 00 00
 8048f8d:
                                             mov
                                                    $0x0,%edx
 8048f92:
                  f7 f1
                                             div
                                                    %ecx
                                                    $0x10,%eax,%eax
 8048f94:
                  6b c0 10
                                             imul
 8048f97:
                  29 c4
                                             sub
                                                    %eax,%esp
 8048f99:
                  89 e0
                                                    %esp,%eax
                                             mov
 8048f9b:
                  83 c0 0f
                                             add
                                                    $0xf,%eax
                  c1 e8 04
 8048f9e:
                                                    $0x4,%eax
                                             shr
 8048fa1:
                  c1 e0 04
                                             shl
                                                    $0x4,%eax
 8048fa4:
                  89 45 f0
                                                    %eax,-0x10(%ebp)
                                             mov
                  83 ec 04
                                                    $0x4,%esp
 8048fa7:
                                             sub
                  ff
                    75 f4
                                             pushl
                                                    -0xc(%ebp)
 8048faa:
                  68 f4 00 00 00
 8048fad:
                                             push
                                                    $0xf4
 8048fb2:
                  ff 75 f0
                                             pushl
                                                    -0x10(%ebp)
                  e8 f6 f9 ff ff
 8048fb5:
                                             call
                                                    80489b0 <memset@plt>
                  83 c4 10
 8048fba:
                                             add
                                                    $0x10,%esp
 8048fbd:
                  83 ec 0c
                                             sub
                                                    $0xc,%esp
 8048fc0:
                  68 5f a5 04 08
                                             push
                                                    $0x804a55f
                  e8 66 f8 ff ff
 8048fc5:
                                             call
                                                    8048830 <printf@plt>
                  83 c4 10
 8048fca:
                                             add
                                                    $0x10,%esp
                 83 7d 08 00
 8048fcd:
                                             cmpl
                                                    $0x0,0x8(%ebp)
 8048fd1:
                  74 07
                                                    8048fda <launch+0x7f>
                                             iе
 8048fd3:
                  e8 13 fd ff ff
                                             call
                                                    8048ceb <testn>
                                                    8048fdf <launch+0x84>
 8048fd8:
                  eb 05
                                             jmp
 8048fda:
                  e8 55 fc ff ff
                                             call
                                                    8048c34 <test>
 8048fdf:
                  a1 24 b2 04 08
                                                    0x804b224,%eax
                                             mov
 8048fe4:
                 85 c0
                                             test
                                                    %eax,%eax
                                                    8049002 <launch+0xa7>
 8048fe6:
                  75 1a
                                             jne
 8048fe8:
                  83 ec 0c
                                             sub
                                                    $0xc,%esp
                  68 f4 a4 04 08
                                                    $0x804a4f4
 8048feb:
                                             push
                                             call
 8048ff0:
                  e8 0b f9 ff ff
                                                    8048900 <puts@plt>
 8048ff5:
                  83 c4 10
                                             add
                                                    $0x10,%esp
 8048ff8:
                  c7 05 24 b2 04 08 00
                                             movl
                                                    $0x0,0x804b224
 8048fff:
                  00 00 00
                 c9
 8049002:
                                             leave
 8049003:
                  c3
                                             ret
08049004 <launcher>:
 8049004:
                 55
                                             push
                                                    %ebp
 8049005:
                  89 e5
                                                    %esp,%ebp
                                             mov
 8049007:
                                                    $0x18,%esp
                  83 ec 18
                                             sub
 804900a:
                  8b 45 08
                                                    0x8(%ebp),%eax
                                             mov
 804900d:
                  a3 30 b2 04 08
                                                    %eax,0x804b230
                                             mov
                                                    0xc(%ebp),%eax
 8049012:
                  8b 45 0c
                                             mov
                  a3 34 b2 04 08
 8049015:
                                             mov
                                                    %eax,0x804b234
 804901a:
                  83 ec 08
                                                    $0x8,%esp
                                             sub
                  6a 00
 804901d:
                                             push
                                                    $0x0
 804901f:
                  6a 00
                                                    $0x0
                                             push
                                                    $0x132
 8049021:
                  68 32 01 00 00
                                             push
 8049026:
                  6a 07
                                             push
                                                    $0x7
                  68 00 00 10 00
                                                    $0×100000
 8049028:
                                             push
 804902d:
                  68 00 60 58 55
                                             push
                                                    $0x55586000
                  e8 09 f9 ff ff
 8049032:
                                             call
                                                    8048940 <mmap@plt>
 8049037:
                  83 c4 20
                                                    $0x20,%esp
                                             add
                                                    %eax,-0xc(%ebp)
 804903a:
                  89 45 f4
                                             moν
 804903d:
                  81 7d f4 00 60 58 55
                                                    $0x55586000,-0xc(%ebp)
                                             cmpl
```

```
8049044:
                  74 21
                                                     8049067 <launcher+0x63>
                                             jе
 8049046:
                  a1 00 b2 04 08
                                             mov
                                                     0x804b200,%eax
 804904b:
                  50
                                             push
                                                     %eax
 804904c:
                  6a 47
                                                     $0x47
                                             push
 804904e:
                  6a 01
                                                     $0x1
                                             push
 8049050:
                  68 6c a5 04 08
                                             push
                                                     $0x804a56c
 8049055:
                  e8 56 f8 ff ff
                                             call
                                                     80488b0 <fwrite@plt>
 804905a:
                  83 c4 10
                                                     $0x10,%esp
                                             add
 804905d:
                  83 ec 0c
                                                     $0xc,%esp
                                             sub
 8049060:
                  6a 01
                                             push
                                                     $0x1
 8049062:
                  e8 b9 f8 ff ff
                                             call
                                                     8048920 <exit@plt>
                  8b 45 f4
 8049067:
                                                     -0xc(%ebp),%eax
                                             mov
                                                     $0xffff8,%eax
                  05 f8 ff 0f 00
 804906a:
                                             add
 804906f:
                  a3 40 c2 04 08
                                             mov
                                                     %eax,0x804c240
 8049074:
                  8b 15 40 c2 04 08
                                                     0x804c240,%edx
                                             mov
 804907a:
                  89 e0
                                                     %esp,%eax
                                             mov
                  89 d4
 804907c:
                                                     %edx,%esp
                                             mov
 804907e:
                  89 c2
                                             mov
                                                     %eax,%edx
 8049080:
                  89
                     15 38 b2 04 08
                                                     %edx,0x804b238
                                             mov
                  8b 15 34 b2 04 08
                                                     0x804b234,%edx
 8049086:
                                             mov
                  a1 30 b2 04 08
                                                     0x804b230,%eax
 804908c:
                                             mov
 8049091:
                  83 ec 08
                                             sub
                                                     $0x8,%esp
 8049094:
                  52
                                             push
                                                     %edx
 8049095:
                  50
                                                     %eax
                                             push
 8049096:
                  e8 c0 fe ff ff
                                                     8048f5b <launch>
                                             call
 804909b:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 804909e:
                  a1 38 b2 04 08
                                             mov
                                                     0x804b238,%eax
 80490a3:
                  89 c4
                                                     %eax,%esp
                                             mov
 80490a5:
                  83 ec 08
                                             sub
                                                     $0x8,%esp
 80490a8:
                  68 00 00 10 00
                                                     $0×100000
                                             push
                    75 f4
 80490ad:
                  ff
                                             pushl
                                                     -0xc(%ebp)
 80490b0:
                  e8 2b f9 ff ff
                                                     80489e0 <munmap@plt>
                                             call
 80490b5:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 80490b8:
                  с9
                                             leave
 80490b9:
                  с3
                                             ret
080490ba <uniqueval>:
 80490ba:
                  55
                                             push
                                                     %ebp
                  89 e5
 80490bb:
                                                     %esp,%ebp
                                             mov
 80490bd:
                  83 ec 08
                                             sub
                                                     $0x8,%esp
                  e8 1b f8 ff ff
 80490c0:
                                             call
                                                     80488e0 <getpid@plt>
 80490c5:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 80490c8:
                  50
                                             push
                                                     %eax
                  e8 52 f7 ff ff
                                                     8048820 srandom@plt>
 8049009:
                                             call
 80490ce:
                  83 c4 10
                                             add
                                                     $0x10,%esp
                  e8 3a f9 ff ff
                                                     8048a10 <random@plt>
 80490d1:
                                             call
 80490d6:
                  c9
                                             leave
 80490d7:
                  c3
                                             ret
080490d8 <main>:
                                                     0x4(%esp),%ecx
                  8d 4c 24 04
 80490d8:
                                             lea
 80490dc:
                  83 e4 f0
                                             and
                                                     $0xfffffff0,%esp
 80490df:
                  ff 71 fc
                                             pushl
                                                     -0x4(%ecx)
 80490e2:
                  55
                                             .
push
                                                     %ebp
 80490e3:
                  89 e5
                                                     %esp,%ebp
                                             mov
 80490e5:
                  53
                                             push
                                                     %ebx
 80490e6:
                  51
                                             push
                                                     %ecx
 80490e7:
                  83 ec 20
                                                     $0x20,%esp
                                             sub
 80490ea:
                  89 cb
                                                     %ecx,%ebx
                                             mov
 80490ec:
                  c7 45 e8 00 00 00 00
                                             movl
                                                     $0x0,-0x18(%ebp)
 80490f3:
                  c7 45 f4 00 00 00 00
                                             movl
                                                     $0x0,-0xc(%ebp)
                                                     $0x1,-0x14(%ebp)
$0x8,%esp
 80490fa:
                  c7 45 ec 01 00 00 00
                                             movl
 8049101:
                  83 ec 08
                                             sub
                                                     $0x8048efb
 8049104:
                  68 fb 8e 04 08
                                             push
 8049109:
                  6a 0b
                                             push
                                                     $0xb
                  e8 60 f7 ff ff
                                                     8048870 <signal@plt>
 804910b:
                                             call
 8049110:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049113:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
                                                     $0x8048ecb
 8049116:
                  68 cb 8e 04 08
                                             push
 804911b:
                  6a 07
                                             push
                                                     $0x7
                  e8 4e f7 ff ff
                                                     8048870 <signal@plt>
 804911d:
                                             call
 8049122:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049125:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
 8049128:
                 68 2b 8f 04 08
                                                     $0x8048f2b
                                             push
 804912d:
                  6a 04
                                             push
                                                     $0x4
 804912f:
                 e8 3c f7 ff ff
                                             call
                                                     8048870 <signal@plt>
```

```
8049134:
                83 c4 10
                                           add
                                                   $0x10,%esp
                 a1 04 b2 04 08
8049137:
                                                   0x804b204,%eax
                                           mov
804913c:
                 a3 1c b2 04 08
                                           mov
                                                   %eax,0x804b21c
8049141:
                 e9 8f 00 00 00
                                                   80491d5 <main+0xfd>
                                            jmp
                 0f be 45 e7
                                                   -0x19(%ebp),%eax
8049146:
                                            movsbl
                 83 e8 67
804914a:
                                            sub
                                                   $0x67.%eax
804914d:
                 83 f8 0e
                                                   $0xe,%eax
                                            cmp
8049150:
                 77
                   72
                                                   80491c4 <main+0xec>
                                            ja
                 8b 04 85 04 a6 04 08
8049152:
                                           mov
                                                   0x804a604(,%eax,4),%eax
                 ff e0
8049159:
                                            jmp
                                                   *%eax
804915b:
                 8b 43 04
                                            mov
                                                   0x4(%ebx),%eax
                 8b 00
804915e:
                                                   (%eax),%eax
                                           mov
                 83 ec 0c
8049160:
                                            sub
                                                   $0xc,%esp
8049163:
                 50
                                            push
                                                   %eax
8049164:
                 e8 ff fc ff ff
                                                   8048e68 <usage>
                                            call
8049169:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                eb 67
                                                   80491d5 < main + 0xfd >
804916c:
                                            jmp
                 c7 45 f4 01 00 00 00
804916e:
                                            movl
                                                   $0x1,-0xc(%ebp)
8049175:
                 c7 45 ec 05 00 00 00
                                                   $0x5,-0x14(%ebp)
                                            movl
                                                   80491d5 <main+0xfd>
804917c:
                 eb 57
                                            jmp
                 a1 08 b2 04 08
804917e:
                                                   0x804b208,%eax
                                            mov
8049183:
                 83 ec 0c
                                            sub
                                                   $0xc,%esp
8049186:
                 50
                                            push
                                                   %eax
                                                   8048840 <strdup@plt>
8049187:
                 e8 b4 f6 ff ff
                                            call
                 83 c4 10
804918c:
                                                   $0x10,%esp
                                            add
804918f:
                 a3 10 b2 04 08
                                                   %eax,0x804b210
                                            mov
8049194:
                 a1 10 b2 04 08
                                            mov
                                                   0x804b210,%eax
8049199:
                 83 ec 0c
                                                   $0xc,%esp
                                            sub
804919c:
                 50
                                            push
                                                   %eax
804919d:
                 e8 64 10 00 00
                                            call
                                                   804a206 <gencookie>
80491a2:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                 a3 20 b2 04 08
                                                   %eax,0x804b220
80491a5:
                                            mov
                   29
                                                   80491d5 <main+0xfd>
80491aa:
                 eb
                                            jmp
80491ac:
                 c7 05 14 b2 04 08 01
                                            movl
                                                   $0x1,0x804b214
80491b3:
                 00 00 00
80491b6:
                                                   80491d5 < main + 0xfd >
                eb 1d
                                            jmp
80491b8:
                 c7 05 18 b2 04 08 01
                                            movl
                                                   $0x1,0x804b218
80491bf:
                 00 00 00
80491c2:
                 eb 11
                                                   80491d5 <main+0xfd>
                                            ami
80491c4:
                 8b 43 04
                                            mov
                                                   0x4(%ebx),%eax
80491c7:
                8b 00
                                            mov
                                                   (%eax),%eax
80491c9:
                 83 ec 0c
                                            sub
                                                   $0xc,%esp
                 50
80491cc:
                                            push
                                                   %eax
                 e8 96 fc ff ff
                                                   8048e68 <usage>
80491cd:
                                            call
80491d2:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                 83 ec 04
80491d5:
                                            sub
                                                   $0x4,%esp
80491d8:
                 68 b4 a5 04 08
                                                   $0x804a5b4
                                            push
                 ff 73 04
80491dd:
                                            pushl
                                                   0x4(%ebx)
                                                   (%ebx)
80491e0:
                 ff
                   33
                                            pushl
                 e8 99 f7 ff ff
                                                   8048980 <getopt@plt>
80491e2:
                                            call
                 83 c4 10
                                                   $0x10,%esp
80491e7:
                                            add
                 88 45 e7
                                                   %al,-0x19(%ebp)
80491ea:
                                           mov
80491ed:
                 80 7d e7 ff
                                                   $0xff,-0x19(%ebp)
                                            cmpb
80491f1:
                 0f 85 4f ff ff
                                            ine
                                                   8049146 <main+0x6e>
                 a1 10 b2 04 08
                                                   0x804b210,%eax
80491f7:
                                           mov
80491fc:
                 85 c0
                                            test
                                                   %eax,%eax
80491fe:
                 75
                   27
                                                   8049227 <main+0x14f>
                                            jne
                 8b 43 04
8049200:
                                                   0x4(%ebx),%eax
                                           mov
                 8b 00
8049203:
                                            mov
                                                   (%eax),%eax
8049205:
                 83 ec 08
                                                   $0x8,%esp
                                            sub
8049208:
                 50
                                            push
                                                   %eax
8049209:
                 68 bc a5 04 08
                                                   $0x804a5bc
                                            push
804920e:
                 e8 1d f6 ff ff
                                                   8048830 <printf@plt>
                                            call
8049213:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                 8b 43 04
8049216:
                                           mov
                                                   0x4(%ebx),%eax
                 8b 00
8049219:
                                                   (%eax),%eax
                                           mov
                 83 ec 0c
804921b:
                                            sub
                                                   $0xc,%esp
804921e:
                 50
                                            push
                                                   8048e68 <usage>
804921f:
                 e8 44 fc ff ff
                                            call
                 83 c4 10
8049224:
                                            add
                                                   $0x10,%esp
                 e8 ef 00 00 00
8049227:
                                            call
                                                   804931b <initialize_bomb>
804922c:
                 a1 10 b2 04 08
                                           mov
                                                   0x804b210,%eax
8049231:
                 83 ec 08
                                            sub
                                                   $0x8,%esp
8049234:
                 50
                                            push
                                                   %eax
8049235:
                 68 e8 a5 04 08
                                            push
                                                   $0x804a5e8
804923a:
                e8 f1 f5 ff ff
                                                   8048830 <printf@plt>
                                            call
```

```
804923f:
                  83 c4 10
                                             add
                                                    $0x10,%esp
                  a1 20 b2 04 08
 8049242:
                                                    0x804b220,%eax
                                             mov
 8049247:
                  83 ec 08
                                             sub
                                                    $0x8,%esp
 804924a:
                  50
                                             push
                                                    %eax
                 68 f4 a5 04 08
e8 db f5 ff ff
 804924b:
                                                    $0x804a5f4
                                             push
 8049250:
                                             call
                                                    8048830 <printf@plt>
 8049255:
                  83 c4 10
                                             add
                                                    $0x10,%esp
 8049258:
                  a1 20 b2 04 08
                                                    0x804b220,%eax
                                             mov
 804925d:
                  83 ec 0c
                                             sub
                                                    $0xc,%esp
                  50
 8049260:
                                             push
                                                    %eax
 8049261:
                  e8 ba f5 ff ff
                                             call
                                                    8048820 <srandom@plt>
                  83 c4 10
 8049266:
                                             add
                                                    $0x10,%esp
                  e8 a2 f7 ff ff
                                                    8048a10 <random@plt>
 8049269:
                                             call
                  25 f0 0f 00 00
 804926e:
                                             and
                                                    $0xff0,%eax
 8049273:
                  05 00 01 00 00
                                                    $0x100,%eax
                                             add
 8049278:
                  89 45 e8
                                             mov
                                                    eax,-0x18(ebp)
                                                    -0x14(%ebp),%eax
 804927b:
                  8b 45 ec
                                             mov
 804927e:
                  83 ec 08
                                             sub
                                                    $0x8,%esp
 8049281:
                  6a 04
                                             push
                                                    $0x4
 8049283:
                  50
                                             push
                                                    %eax
                  e8 c7 f7 ff ff
                                                    8048a50 <calloc@plt>
 8049284:
                                             call
                  83 c4 10
 8049289:
                                             add
                                                    $0x10,%esp
 804928c:
                  89 45 e0
                                                     %eax,-0x20(%ebp)
                                             mov
                                                     -0x20(%ebp),%eax
 804928f:
                  8b 45 e0
                                             mov
                  c7 00 00 00 00 00
 8049292:
                                                    $0x0,(%eax)
                                             movl
 8049298:
                  c7 45 f0 01 00 00 00
                                             movl
                                                    $0x1,-0x10(%ebp)
 804929f:
                  eb 29
                                             jmp
                                                    80492ca <main+0x1f2>
                  8b 45 f0
 80492a1:
                                                    -0x10(%ebp),%eax
                                             mov
                  8d 14 85 00 00 00 00
 80492a4:
                                             lea
                                                    0x0(,%eax,4),%edx
 80492ab:
                  8b 45 e0
                                                     -0x20(%ebp),%eax
                                             mov
                  8d 1c 02
                                                     (%edx,%eax,1),%ebx
 80492ae:
                                             lea
                  e8 5a f7 ff ff
                                                    8048a10 <random@plt>
 80492b1:
                                             call
                  25 f0 00 00 00
 80492b6:
                                             and
                                                    $0xf0,%eax
 80492bb:
                  ba 80 00 00 00
                                                    $0x80,%edx
                                             mov
 80492c0:
                  29 c2
                                             sub
                                                    %eax,%edx
 80492c2:
                  89 d0
                                                    %edx,%eax
                                             mov
 80492c4:
                  89 03
                                             mov
                                                    %eax,(%ebx)
 80492c6:
                  83 45 f0 01
                                             addl
                                                    $0x1,-0x10(%ebp)
                  8b 45 f0
                                                     -0x10(%ebp),%eax
 80492ca:
                                             mov
                  3b 45 ec
                                                     -0x14(%ebp),%eax
 80492cd:
                                             cmp
 80492d0:
                  7c cf
                                             jι
                                                    80492a1 <main+0x1c9>
 80492d2:
                  c7 45 f0 00 00 00 00
                                             movl
                                                    $0x0,-0x10(%ebp)
 80492d9:
                  eb 29
                                                    8049304 <main+0x22c>
                                             jmp
                  8b 45 f0
 80492db:
                                                     -0x10(%ebp),%eax
                                             mov
 80492de:
                  8d 14 85 00 00 00 00
                                             lea
                                                    0x0(,%eax,4),%edx
 80492e5:
                  8b 45 e0
                                                     -0x20(%ebp),%eax
                                             mov
 80492e8:
                  01 d0
                                                    %edx,%eax
                                             add
                  8b 10
                                                    (%eax),%edx
 80492ea:
                                             mov
 80492ec:
                  8b 45 e8
                                             mov
                                                     -0x18(%ebp),%eax
                  01 d0
 80492ef:
                                             add
                                                    %edx,%eax
                                                    $0x8,%esp
 80492f1:
                  83 ec 08
                                             sub
 80492f4:
                  50
                                             push
                                                    %eax
 80492f5:
                  ff 75 f4
                                                    -0xc(%ebp)
                                             pushl
 80492f8:
                  e8 07 fd ff ff
                                             call
                                                    8049004 <launcher>
                  83 c4 10
 80492fd:
                                                    $0x10,%esp
                                             add
 8049300:
                  83 45 f0 01
                                             addl
                                                    $0x1,-0x10(%ebp)
                  8b 45 f0
 8049304:
                                                     -0x10(%ebp),%eax
                                             mov
                                                     -0x14(%ebp).%eax
 8049307:
                  3b 45 ec
                                             cmp
                                                    80492db <main+0x203>
 804930a:
                  7c cf
                                             jι
                  b8 00 00 00 00
 804930c:
                                             mov
                                                    $0x0,%eax
 8049311:
                  8d 65 f8
                                                     -0x8(%ebp),%esp
                                             lea
 8049314:
                  59
                                                    %ecx
                                             pop
 8049315:
                  5b
                                             pop
                                                    %ehx
 8049316:
                  5d
                                                    %ebp
                                             pop
                                                    -0x4(%ecx),%esp
 8049317:
                  8d 61 fc
                                             lea
 804931a:
                  c3
                                             ret
0804931b <initialize_bomb>:
 804931b:
                 55
                                             push
                                                    %ebp
 804931c:
                  89 e5
                                                    %esp,%ebp
                                             mov
                  81 ec 18 24 00 00
 804931e:
                                             sub
                                                    $0x2418,%esp
 8049324:
                  c7 45 f0 00 00 00 00
                                             movl
                                                    $0x0,-0x10(%ebp)
 804932b:
                  a1 18 b2 04 08
                                                    0x804b218,%eax
                                             mov
 8049330:
                 85 c0
                                                    %eax,%eax
                                             test
                                             jе
 8049332:
                  74 0d
                                                    8049341 <initialize_bomb+0x26>
 8049334:
                  83 ec 0c
                                             sub
                                                    $0xc,%esp
```

```
8049337:
                 6a ff
                                                    $0xfffffff
                                            push
                 e8 db 0b 00 00
8049339:
                                            call
                                                    8049f19 <init_timeout>
804933e:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049341:
                 a1 14 b2 04 08
                                            mov
                                                    0x804b214,%eax
8049346:
                 85 c0
                                            test
                                                    %eax,%eax
                 0f 84 10 01 00 00
8049348:
                                            jе
                                                    804945e <initialize_bomb+0x143>
804934e:
                 83 ec 08
                                            sub
                                                    $0x8,%esp
8049351:
                 68 00 04 00 00
                                            push
                                                    $0×400
                 8d 85 f0 fb ff ff
8049356:
                                            lea
                                                    -0x410(%ebp),%eax
804935c:
                 50
                                            push
                                                    %eax
                 e8 8e f5 ff ff
804935d:
                                            call
                                                    80488f0 <gethostname@plt>
                 83 c4 10
8049362:
                                            add
                                                    $0x10,%esp
8049365:
                 85 c0
                                                    %eax,%eax
                                            test
                 74 1a
8049367:
                                                    8049383 <initialize_bomb+0x68>
                                            jе
8049369:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
804936c:
                 68 40 a6 04 08
                                            push
                                                    $0x804a640
                                                    8048900 <puts@plt>
8049371:
                 e8 8a f5 ff ff
                                            call
8049376:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049379:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
804937c:
                 6a 08
                                            push
                                                    $0x8
                 e8 9d f5 ff ff
c7 45 f4 00 00 00 00
                                                    8048920 <exit@plt>
804937e:
                                            call
8049383:
                                            movl
                                                    $0x0,-0xc(%ebp)
804938a:
                 eb 2e
                                                    80493ba <initialize_bomb+0x9f>
                                            jmp
                                                    -0xc(%ebp),%eax
0x804b240(,%eax,4),%eax
804938c:
                 8b 45 f4
                                            mov
804938f:
                 8b 04 85 40 b2 04 08
                                            mov
8049396:
                 83 ec 08
                                                    $0x8,%esp
                                            sub
8049399:
                 8d 95 f0 fb ff ff
                                            lea
                                                    -0x410(\%ebp),%edx
804939f:
                                                    %edx
                 52
                                            push
80493a0:
                 50
                                            push
                                                    %eax
80493a1:
                 e8 ea f5 ff ff
                                            call
                                                    8048990 <strcasecmp@plt>
                 83 c4 10
80493a6:
                                            add
                                                    $0x10,%esp
                 85 c0
80493a9:
                                            test
                                                    %eax,%eax
                 75 09
                                                    80493b6 <initialize_bomb+0x9b>
80493ab:
                                            jne
80493ad:
                 c7 45 f0 01 00 00 00
                                            movl
                                                    $0x1,-0x10(%ebp)
80493b4:
                 eb 12
                                                    80493c8 <initialize_bomb+0xad>
                                            ami
80493h6:
                 83 45 f4 01
                                            addl
                                                    $0x1,-0xc(%ebp)
                                                    -0xc(%ebp),%eax
0x804b240(,%eax,4),%eax
80493ba:
                 8b 45 f4
                                            moν
80493bd:
                 8b 04 85 40 b2 04 08
                                            mov
80493c4:
                 85 c0
                                                    %eax,%eax
                                            test
80493c6:
                 75 c4
                                                    804938c <initialize bomb+0x71>
                                            jne
                 c7 45 f0 01 00 00 00
80493c8:
                                            movl
                                                    $0x1,-0x10(%ebp)
80493cf:
                 83 7d f0 00
                                            cmpl
                                                    $0x0,-0x10(%ebp)
80493d3:
                 75 52
                                                    8049427 <initialize_bomb+0x10c>
                                            ine
                                                    $0x8,%esp
80493d5:
                 83 ec 08
                                            sub
80493d8:
                 8d 85 f0 fb ff ff
                                            lea
                                                    -0x410(%ebp),%eax
80493de:
                 50
                                            push
80493df:
                 68 78 a6 04 08
                                                    $0x804a678
                                            push
80493e4:
                 e8 47 f4 ff ff
                                                    8048830 <printf@plt>
                                            call
80493e9:
                 83 c4 10
                                            add
                                                    $0x10,%esp
                 c7 45 f4 00 00 00 00
                                                    $0x0,-0xc(%ebp)
80493ec:
                                            movl
                                                    804940f <initialize_bomb+0xf4>
80493f3:
                 eb 1a
                                            jmp
80493f5:
                 8b 45 f4
                                            mov
                                                    -0xc(%ebp),%eax
80493f8:
                 8b 04 85 40 b2 04 08
                                                    0x804b240(,%eax,4),%eax
                                            mov
80493ff:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
8049402:
                 50
                                                    %eax
                                            push
8049403:
                 e8 f8 f4 ff ff
                                            call
                                                    8048900 <puts@plt>
8049408:
                 83 c4 10
                                                    $0x10,%esp
                                            add
804940b:
                 83 45 f4 01
                                            addl
                                                    $0x1.-0xc(%ebp)
804940f:
                 8b 45 f4
                                                    -0xc(%ebp),%eax
                                            mov
8049412:
                 8b 04 85 40 b2 04 08
                                                    0x804b240(,%eax,4),%eax
                                            mov
8049419:
                 85 c0
                                            test
                                                    %eax,%eax
                 75 d8
804941b:
                                                    80493f5 <initialize_bomb+0xda>
                                            ine
804941d:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
8049420:
                 6a 08
                                            push
                                                    $0x8
                 e8 f9 f4 ff ff
8049422:
                                            call
                                                    8048920 <exit@plt>
8049427:
                 83 ec 0c
                                                    $0xc,%esp
                                            sub
                 8d 85 f0 db ff ff
804942a:
                                            lea
                                                    -0x2410(%ebp),%eax
8049430:
                 50
                                            push
                                                    8049f57 <init_driver>
8049431:
                 e8 21 0b 00 00
                                            call
8049436:
                 83 c4 10
                                                    $0x10.%esp
                                            hhs
8049439:
                 85 c0
                                            test
                                                    %eax,%eax
804943b:
                 79 21
                                            jns
                                                    804945e <initialize_bomb+0x143>
804943d:
                 83 ec 08
                                            sub
                                                    $0x8,%esp
8049440:
                 8d 85 f0 db ff ff
                                            lea
                                                    -0x2410(%ebp),%eax
8049446:
                 50
                                            push
                                                    %eax
8049447:
                 68 b3 a6 04 08
                                                    $0x804a6b3
                                            push
```

```
8048830 <printf@plt>
 804944c:
                  e8 df f3 ff ff
                                              call
 8049451:
                  83 c4 10
                                              bhs
                                                     $0x10,%esp
 8049454:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 8049457:
                  6a 08
                                                     $0x8
                                              push
                  e8 c2 f4 ff ff
 8049459:
                                              call
                                                     8048920 <exit@plt>
 804945e:
                  c9
                                              leave
 804945f:
                  c3
                                              ret
08049460 <validate>:
 8049460:
                  55
                                              push
                                                     %ebp
 8049461:
                  89 e5
                                              mov
                                                     %esp,%ebp
 8049463:
                                                     $0x4018,%esp
                  81 ec 18 40 00 00
                                              sub
 8049469:
                  a1 10 b2 04 08
                                              mov
                                                     0x804b210,%eax
 804946e:
                  85 c0
                                              test
                                                     %eax,%eax
 8049470:
                  75 15
                                                     8049487 <validate+0x27>
                                              jne
 8049472:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 8049475:
                  68 c8 a6 04 08
                                                     $0x804a6c8
                                              push
                                                     8048900 <puts@plt>
 804947a:
                  e8 81 f4 ff ff
                                              call
 804947f:
                  83
                     c4 10
                                                     $0x10,%esp
                                              add
                  e9 36 01 00 00
                                                     80495bd <validate+0x15d>
 8049482:
                                              jmp
                  83 7d 08 00
                                                     $0x0,0x8(%ebp)
 8049487:
                                              cmpl
                  78 06
 804948b:
                                              js
                                                     8049493 <validate+0x33>
 804948d:
                  83 7d 08 04
                                              cmpl
                                                     $0x4,0x8(%ebp)
                                              jle
 8049491:
                  7e 15
                                                     80494a8 <validate+0x48>
 8049493:
                  83 ec 0c
                                                     $0xc,%esp
                                              sub
 8049496:
                  68 f4 a6 04 08
                                              push
                                                     $0x804a6f4
 804949b:
                  e8 60 f4 ff ff
                                              call
                                                     8048900 <puts@plt>
                  83 c4 10
                                                     $0x10,%esp
 80494a0:
                                              add
                                                     80495bd <validate+0x15d>
 80494a3:
                  e9 15 01 00 00
                                              jmp
 80494a8:
                  c7 05 24 b2 04 08 01
                                              movl
                                                     $0x1,0x804b224
                  00 00 00
 80494af:
 80494b2:
                  8b 45 08
                                                     0x8(%ebp),%eax
0x804b1b4(,%eax,4),%eax
                                              mov
 80494h5:
                  8b 04 85 b4 b1 04 08
                                              mov
 80494bc:
                  8d 50 ff
                                                      -0x1(%eax), %edx
                                              lea
                                                     0x8(%ebp),%eax
%edx,0x804b1b4(,%eax,4)
                  8b 45 08
 80494bf:
                                              mov
 80494c2:
                  89 14 85 b4 b1 04 08
                                              mov
                                                     0x8(%ebp),%eax
0x804b1b4(,%eax,4),%eax
 80494c9:
                  8b 45 08
                                              mov
 80494cc:
                  8b 04 85 b4 b1 04 08
                                              mov
 80494d3:
                  85 c0
                                              test
                                                     %eax,%eax
                                                     80494ec <validate+0x8c>
 80494d5:
                  7e 15
                                              jle
                  83 ec 0c
 80494d7:
                                              sub
                                                     $0xc,%esp
 80494da:
                  68 1a a7 04 08
                                              push
                                                     $0x804a71a
 80494df:
                  e8 1c f4 ff ff
                                                     8048900 <puts@plt>
                                              call
                  83 c4 10
 80494e4:
                                                     $0x10,%esp
                                              add
 80494e7:
                  e9 d1 00 00 00
                                                     80495bd <validate+0x15d>
                                              jmp
 80494ec:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 80494ef:
                  68 25 a7 04 08
                                                     $0x804a725
                                              push
 80494f4:
                  e8 07 f4 ff ff
                                                     8048900 <puts@plt>
                                              call
 80494f9:
                  83 c4 10
                                              add
                                                     $0x10,%esp
 80494fc:
                  a1 14 b2 04 08
                                                     0x804b214,%eax
                                              mov
 8049501:
                                                     %eax,%eax
                  85 c0
                                              test
 8049503:
                  0f 84 a4 00 00 00
                                                     80495ad <validate+0x14d>
                                              jе
 8049509:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
                  68 80 c2 04 08
e8 3a f4 ff ff
 804950c:
                                              push
                                                     $0x804c280
                                                     8048950 <strlen@plt>
 8049511:
                                              call
 8049516:
                  83 c4 10
                                              add
                                                     $0x10,%esp
 8049519:
                  83 c0 20
                                                     $0x20,%eax
                                              add
                  3d 00 20 00 00
                                                     $0x2000,%eax
 804951c:
                                              amo
                  76 15
                                                     8049538 <validate+0xd8>
 8049521:
                                              jbe
 8049523:
                  83 ec 0c
                                                     $0xc,%esp
                                              sub
 8049526:
                  68 2c a7 04 08
                                                     $0x804a72c
                                              push
 804952b:
                  e8 d0 f3 ff ff
                                                     8048900 <puts@plt>
                                              call
                  83 c4 10
 8049530:
                                                     $0x10,%esp
                                              add
                  e9 85 00 00 00
 8049533:
                                                     80495bd <validate+0x15d>
                                              jmp
 8049538:
                  a1 20 b2 04 08
                                              mov
                                                     0x804b220,%eax
 804953d:
                  83 ec 0c
                                                     $0xc,%esp
                                              sub
                                                     $0x804c280
 8049540:
                  68 80 c2 04 08
                                              push
 8049545:
                  50
                                              push
                                                     %eax
 8049546:
                  ff 75 08
                                              pushl
                                                     0x8(%ebp)
                  68 63 a7 04 08
8d 85 f4 df ff ff
 8049549:
                                                     $0x804a763
                                              push
 804954e:
                                              lea
                                                      -0x200c(%ebp),%eax
 8049554:
                  50
                                              push
                                                     %eax
                  e8 96 f4 ff ff
 8049555:
                                              call
                                                     80489f0 <sprintf@plt>
 804955a:
                  83 c4 20
                                                     $0x20,%esp
                                              add
                                                     0x804b210,%eax
 804955d:
                  a1 10 b2 04 08
                                              moν
 8049562:
                  8d 95 f4 bf ff ff
                                              lea
                                                     -0x400c(%ebp),%edx
```

```
8049568:
                                                     %edx
                  52
                                              push
                  6a 00
 8049569:
                                              push
                                                     $0x0
                  8d 95 f4 df ff ff
                                                     -0x200c(%ebp),%edx
 804956b:
                                              lea
 8049571:
                  52
                                              push
                                                     %eax
 8049572:
                  50
                                              push
                                                     804a0fd <driver_post>
 8049573:
                  e8 85 0b 00 00
                                              call
 8049578:
                  83 c4 10
                                              add
                                                     $0x10,%esp
                                                     %eax,-0xc(%ebp)
$0x0,-0xc(%ebp)
 804957b:
                  89 45 f4
                                              mov
                  83 7d f4 00
 804957e:
                                              cmpl
 8049582:
                  75 12
                                                     8049596 <validate+0x136>
                                              jne
 8049584:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
                  68 6c a7 04 08
e8 6f f3 ff ff
 8049587:
                                                     $0x804a76c
                                              push
 804958c:
                                                     8048900 <puts@plt>
                                              call
                  83 c4 10
 8049591:
                                              add
                                                     $0x10,%esp
 8049594:
                  eb 17
                                                     80495ad <validate+0x14d>
                                              jmp
 8049596:
                  83 ec 08
                                              sub
                                                     $0x8,%esp
                  8d 85 f4 bf ff ff
 8049599:
                                                     -0x400c(%ebp),%eax
                                              lea
 804959f:
                  50
                                              push
                                                     %eax
 80495a0:
                  68 9c a7 04 08
                                                     $0x804a79c
                                              push
 80495a5:
                  e8 86 f2 ff ff
                                              call
                                                     8048830 <printf@plt>
                  83 c4 10
 80495aa:
                                              add
                                                     $0x10,%esp
 80495ad:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 80495b0:
                  68 da a7 04 08
                                              push
                                                     $0x804a7da
                  e8 46 f3 ff ff
83 c4 10
 80495b5:
                                              call
                                                     8048900 <puts@plt>
 80495ba:
                                                     $0x10,%esp
                                             add
 80495bd:
                  c9
                                              leave
 80495be:
                  с3
                                              ret
080495bf <sigalrm_handler>:
 80495bf:
                  55
                                              push
                                                     %ebp
 80495c0:
                                             mov
                                                     %esp,%ebp
                                                     $0x8,%esp
$0x8,%esp
 80495c2:
                  83 ec 08
                                              sub
 80495c5:
                  83 ec 08
                                              sub
 80495c8:
                  6a 05
                                                     $0x5
                                              push
 80495ca:
                  68 e4 a7 04 08
                                              push
                                                     $0x804a7e4
 80495cf:
                  e8 5c f2 ff ff
                                                     8048830 <printf@plt>
                                              call
 80495d4:
                  83 c4 10
                                              add
                                                     $0x10,%esp
 80495d7:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 80495da:
                  6a 01
                                              push
                                                     $0x1
                                                     8048920 <exit@plt>
 80495dc:
                  e8 3f f3 ff ff
                                              call
080495e1 <rio_readinitb>:
 80495e1:
                  55
                                              push
                                                     %ebp
                  89 e5
                                                     %esp,%ebp
 80495e2:
                                             mov
 80495e4:
                  8b 45 08
                                              mov
                                                     0x8(%ebp),%eax
 80495e7:
                  8b 55 0c
                                                     0xc(%ebp),%edx
                                              mov
 80495ea:
                  89 10
                                                     %edx,(%eax)
                                             mov
                                                     0x8(%ebp),%eax
 80495ec:
                  8b 45 08
                                              mov
 80495ef:
                  c7 40 04 00 00 00 00
                                              movl
                                                     $0x0,0x4(%eax)
 80495f6:
                  8b 45 08
                                                     0x8(%ebp),%eax
                                             mov
 80495f9:
                  8d 50 0c
                                                     0xc(%eax),%edx
                                              lea
                  8b 45 08
 80495fc:
                                             mov
                                                     0x8(%ebp),%eax
 80495ff:
                  89 50 08
                                                     %edx,0x8(%eax)
                                              mov
 8049602:
                  5d
                                                     %ebp
                                              pop
 8049603:
                  c3
                                              ret
08049604 <rio_read>:
 8049604:
                  55
                                              push
                                                     %ebp
 8049605:
                  89 e5
                                                     %esp,%ebp
                                              mov
 8049607:
                  83 ec 18
                                              sub
                                                     $0x18,%esp
 804960a:
                  eb 5f
                                                     804966b <rio_read+0x67>
                                              jmp
                                                     0x8(%ebp),%eax
                  8b 45 08
 804960c:
                                              mov
 804960f:
                  8d 50 0c
                                                     0xc(%eax),%edx
                                              lea
 8049612:
                  8b 45 08
                                              mov
                                                     0x8(%ebp), %eax
 8049615:
                  8b 00
                                             mov
                                                     (%eax), %eax
 8049617:
                  83 ec 04
                                                     $0x4,%esp
                                              sub
 804961a:
                  68 00 20 00 00
                                              push
                                                     $0x2000
 804961f:
                  52
                                              push
 8049620:
                  50
                                                     %eax
                                              push
 8049621:
                  e8 ea f1 ff ff
                                              call
                                                     8048810 <read@plt>
                  83 c4 10
 8049626:
                                              add
                                                     $0x10,%esp
 8049629:
                  89 c2
                                             mov
                                                     %eax,%edx
                  8b 45 08
 804962b:
                                                     0x8(%ebp),%eax
                                             mov
 804962e:
                  89 50 04
                                                     %edx,0x4(%eax)
                                             mov
 8049631:
                  8b 45 08
                                              mov
                                                     0x8(%ebp),%eax
 8049634:
                  8b 40 04
                                                     0x4(%eax),%eax
                                             mov
```

```
8049637:
                  85 c0
                                              test
                                                     %eax.%eax
                                                     804964e <rio_read+0x4a>
80489c0 <__errno_location@plt>
                  79 13
 8049639:
                                              ins
                  e8 80 f3 ff ff
 804963b:
                                              call
 8049640:
                  8b 00
                                                      (%eax),%eax
                                              mov
 8049642:
                  83 f8 04
                                                     $0x4,%eax
                                              cmp
 8049645:
                  74
                     24
                                              jе
                                                     804966b <rio_read+0x67>
                  b8 ff ff ff ff
                                                     $0xffffffff, %eax
 8049647:
                                              mov
 804964c:
                  eb 7f
                                                     80496cd <rio_read+0xc9>
                                              jmp
                                                     0x8(%ebp),%eax
                  8b 45 08
 804964e:
                                              mov
 8049651:
                  8b 40 04
                                              \text{mov}
                                                     0x4(%eax),%eax
 8049654:
                  85 c0
                                              test
                                                     %eax,%eax
                  75 07
                                                     804965f <rio_read+0x5b>
 8049656:
                                              ine
                                                     $0x0,%eax
                  b8 00 00 00 00
 8049658:
                                              mov
 804965d:
                  eb 6e
                                              jmp
                                                     80496cd <rio_read+0xc9>
 804965f:
                  8b 45 08
                                                     0x8(%ebp),%eax
                                              mov
 8049662:
                  8d 50 0c
                                              lea
                                                     0xc(%eax),%edx
 8049665:
                  8b 45 08
                                                     0x8(%ebp),%eax
                                              mov
                  89 50 08
 8049668:
                                              \text{mov}
                                                     %edx,0x8(%eax)
                                                     0x8(%ebp),%eax
 804966b:
                  8b
                     45 08
                                              mov
                  8b 40 04
                                                     0x4(%eax),%eax
 804966e:
                                              mov
                  85 c0
 8049671:
                                                     %eax,%eax
                                              test
                  7e 97
 8049673:
                                              jle
                                                     804960c <rio_read+0x8>
 8049675:
                  8b 45 10
                                                     0x10(%ebp),%eax
                                              mov
                                                     %eax,-0xc(%ebp)
                  89 45 f4
 8049678:
                                              mov
 804967b:
                  8b 45 08
                                                     0x8(%ebp),%eax
                                              mov
 804967e:
                  8b 40 04
                                                     0x4(%eax),%eax
                                              mov
 8049681:
                  3b 45 10
                                              cmp
                                                     0x10(%ebp),%eax
                                                     804968f <rio_read+0x8b>
 8049684:
                  73 09
                                              jae
 8049686:
                  8b 45 08
                                                     0x8(%ebp),%eax
                                              \text{mov}
 8049689:
                  8b 40 04
                                                     0x4(%eax),%eax
                                              mov
 804968c:
                  89 45 f4
                                                     %eax,-0xc(%ebp)
                                              mov
                  8b 55 f4
                                                     -0xc(%ebp),%edx
 804968f:
                                              mov
                  8b 45 08
 8049692:
                                              mov
                                                     0x8(%ebp),%eax
 8049695:
                  8b 40 08
                                                     0x8(%eax),%eax
                                              mov
 8049698:
                  83 ec 04
                                                     $0x4,%esp
                                              sub
 804969b:
                  52
                                              push
                                                     %edx
 804969c:
                  50
                                              push
                                                     %eax
 804969d:
                  ff
                     75 Øc
                                              pushl
                                                     0xc(%ebp)
                                                     8048850 <memcpy@plt>
 80496a0:
                  e8 ab f1 ff ff
                                              call
                  83 c4 10
 80496a5:
                                              add
                                                     $0x10,%esp
                  8b 45 08
 80496a8:
                                              mov
                                                     0x8(%ebp),%eax
 80496ab:
                  8b 50 08
                                              mov
                                                     0x8(%eax),%edx
                  8b 45 f4
 80496ae:
                                                      -0xc(%ebp),%eax
                                              mov
 80496b1:
                  01 c2
                                              add
                                                     %eax,%edx
 80496b3:
                  8b 45 08
                                              mov
                                                     0x8(%ebp),%eax
 80496b6:
                  89 50 08
                                              mov
                                                     %edx,0x8(%eax)
                                                     0x8(%ebp),%eax
 80496b9:
                  8b 45 08
                                              mov
                  8b 40 04
 80496bc:
                                              mov
                                                     0x4(%eax),%eax
 80496bf:
                  2b 45 f4
                                              sub
                                                      -0xc(%ebp),%eax
                  89 c2
 80496c2:
                                                     %eax,%edx
                                              mov
 80496c4:
                  8b 45 08
                                                     0x8(%ebp),%eax
                                              mov
 80496c7:
                  89 50 04
                                              mov
                                                     %edx,0x4(%eax)
 80496ca:
                  8b 45 f4
                                                     -0xc(%ebp),%eax
                                              mov
 80496cd:
                  c9
                                              leave
 80496ce:
                  c3
                                              ret
080496cf <rio_readlineb>:
 80496cf:
                  55
                                              push
                                                     %ebp
                  89 e5
 80496d0:
                                                     %esp,%ebp
                                              mov
 80496d2:
                  83 ec 18
                                              sub
                                                     $0x18,%esp
 80496d5:
                  8b 45 0c
                                                     0xc(%ebp),%eax
                                              mov
                                                     %eax,-0x10(%ebp)
$0x1,-0xc(%ebp)
 80496d8:
                  89 45 f0
                                              mov
 80496db:
                  c7 45 f4 01 00 00 00
                                              movl
 80496e2:
                  eb 56
                                                     804973a <rio_readlineb+0x6b>
                                              jmp
 80496e4:
                  83 ec 04
                                              sub
                                                     $0x4,%esp
 80496e7:
                  6a 01
                                              push
                                                     $0x1
 80496e9:
                  8d 45 eb
                                              lea
                                                     -0x15(%ebp),%eax
 80496ec:
                  50
                                              push
                                                     0x8(%ebp)
 80496ed:
                  ff 75 08
                                              pushl
                  e8 0f ff ff ff
                                                     8049604 <rio_read>
 80496f0:
                                              call
                  83 c4 10
 80496f5:
                                              add
                                                     $0x10,%esp
                                                     %eax,-0x14(%ebp)
 80496f8:
                  89 45 ec
                                              mov
                  83 7d ec 01
 80496fb:
                                              cmpl
                                                     $0x1,-0x14(%ebp)
 80496ff:
                  75 19
                                                     804971a <rio_readlineb+0x4b>
                                              jne
                  8b 45 f0
 8049701:
                                              mov
                                                      -0x10(%ebp),%eax
 8049704:
                  8d 50 01
                                              lea
                                                     0x1(%eax),%edx
```

```
%edx,-0x10(%ebp)
 8049707:
                  89 55 f0
                                             mov
                  0f b6 55 eb
                                             movzbl -0x15(%ebp),%edx
 804970a:
 804970e:
                  88 10
                                             mov
                                                     %dl,(%eax)
 8049710:
                  0f b6 45 eb
                                             movzbl -0x15(%ebp),%eax
 8049714:
                  3c 0a
                                                     $0xa,%al
                                              cmp
                                                     8049736 <rio_readlineb+0x67>
                  75
 8049716:
                     1e
                                              jne
                                                     8049742 <rio_readlineb+0x73>
 8049718:
                  eb 28
                                              jmp
 804971a:
                  83 7d ec 00
                                                     $0x0,-0x14(%ebp)
                                              cmpl
                  75 0f
 804971e:
                                                     804972f <rio_readlineb+0x60>
                                             jne
                  83 7d f4 01
                                                     $0x1,-0xc(%ebp)
 8049720:
                                              cmpl
 8049724:
                  75 07
                                              jne
                                                     804972d <rio_readlineb+0x5e>
                  b8 00 00 00 00
 8049726:
                                                     $0x0,%eax
                                             mov
                                                     804974b <rio_readlineb+0x7c>
8049742 <rio_readlineb+0x73>
 804972h:
                  eb 1e
                                              ami
 804972d:
                  eb 13
                                              jmp
                                                     $0xffffffff, %eax
 804972f:
                  b8 ff ff ff ff
                                             mov
 8049734:
                  eb 15
                                                     804974b <rio_readlineb+0x7c>
                                              jmp
 8049736:
                  83 45 f4 01
                                                     $0x1,-0xc(%ebp)
                                             addl
                  8b 45 f4
                                                     -0xc(%ebp),%eax
 804973a:
                                             \text{mov}
 804973d:
                  3b 45 10
                                                     0x10(%ebp),%eax
                                              cmp
 8049740:
                  72 a2
                                              ib
                                                     80496e4 <rio_readlineb+0x15>
                                                     -0x10(%ebp),%eax
                  8b 45 f0
 8049742:
                                             mov
 8049745:
                  c6 00 00
                                             movb
                                                     $0x0,(%eax)
 8049748:
                  8b 45 f4
                                                     -0xc(%ebp),%eax
                                             mov
 804974b:
                                              leave
                  c9
 804974c:
                  c3
                                              ret
0804974d <rio writen>:
 804974d:
                  55
                                             push
                                                     %ebp
 804974e:
                  89 e5
                                             mov
                                                     %esp,%ebp
 8049750:
                  83 ec 18
                                                     $0x18,%esp
                                              sub
 8049753:
                  8b 45 10
                                             mov
                                                     0x10(%ebp),%eax
 8049756:
                  89 45 f4
                                                     %eax,-0xc(%ebp)
                                             mov
                  8b 45 0c
 8049759:
                                             mov
                                                     0xc(%ebp),%eax
 804975c:
                  89 45 ec
                                                     %eax,-0x14(%ebp)
                                             mov
                  eb 45
 804975f:
                                                     80497a6 <rio_writen+0x59>
                                              ami
 8049761:
                  83 ec 04
                                                     $0x4,%esp
                                             sub
 8049764:
                  ff 75 f4
                                              pushl
                                                     -0xc(%ebp)
 8049767:
                  ff
                     75 ec
                                              pushl
                                                     -0x14(%ebp)
                  ff 75 08
 804976a:
                                             pushl
                                                     0x8(%ebp)
                  e8 fe f1 ff ff
                                                     804976d:
                                              call
 8049772:
                  83 c4 10
                                             add
                                                     $0x10,%esp
                                                     %eax,-0x10(%ebp)
$0x0,-0x10(%ebp)
804979a <rio_writen+0x4d>
 8049775:
                  89 45 f0
                                             moν
 8049778:
                  83 7d f0 00
                                              cmpl
 804977c:
                  7f 1c
                                              jg
                                              call
 804977e:
                  e8 3d f2 ff ff
                                                     80489c0 <__errno_location@plt>
 8049783:
                  8b 00
                                             mov
                                                     (%eax),%eax
                                                     $0x4,%eax
 8049785:
                  83 f8 04
                                             cmp
                  75 09
                                                     8049793 <rio_writen+0x46>
 8049788:
                                              jne
                                              movl
 804978a:
                  c7 45 f0 00 00 00 00
                                                     $0x0,-0x10(%ebp)
                                                     804979a <rio writen+0x4d>
 8049791:
                  eb 07
                                              ami
                                                     $0xffffffff,%eax
                  b8 ff ff ff ff
 8049793:
                                             mov
                  eb 15
 8049798:
                                              jmp
                                                     80497af <rio_writen+0x62>
 804979a:
                  8b 45 f0
                                                     -0x10(%ebp), %eax
                                             mov
 804979d:
                  29 45 f4
                                              sub
                                                     %eax,-0xc(%ebp)
                  8b 45 f0
                                                     -0x10(%ebp),%eax
 80497a0:
                                             mov
 80497a3:
                  01 45 ec
                                              add
                                                     %eax,-0x14(%ebp)
 80497a6:
                  83
                     7d f4 00
                                                     $0x0,-0xc(%ebp)
                                              cmpl
 80497aa:
                  75 b5
                                                     8049761 <rio writen+0x14>
                                             ine
                  8b 45 10
                                                     0x10(%ebp),%eax
 80497ac:
                                             mov
 80497af:
                  с9
                                              leave
 80497b0:
                                              ret
080497b1 <urlencode>:
 80497b1:
                  55
                                              push
                                                     %ebp
                  89 e5
 80497b2:
                                             mov
                                                     %esp,%ebp
 80497b4:
                                                     $0x18,%esp
                  83 ec 18
                                             sub
 80497b7:
                  83 ec 0c
                                              sub
                                                     $0xc,%esp
 80497ba:
                  ff
                     75 08
                                              pushl
                                                     0x8(%ebp)
                                                     8048950 <strlen@plt>
 80497bd:
                  e8 8e f1 ff ff
                                             call
                  83 c4 10
 80497c2:
                                             bhs
                                                     $0x10,%esp
                  89 45 f4
                                                     %eax,-0xc(%ebp)
 80497c5:
                                             mov
 80497c8:
                  e9 08 01 00 00
                                             jmp
                                                     80498d5 <urlencode+0x124>
                  8b 45 08
                                                     0x8(%ebp),%eax
 80497cd:
                                             mov
 80497d0:
                  0f b6 00
                                             movzbl (%eax),%eax
 80497d3:
                  3c 2a
                                                     $0x2a,%al
                                              cmp
 80497d5:
                  74 5a
                                              jе
                                                     8049831 <urlencode+0x80>
```

```
80497d7:
                 8b 45 08
                                                   0x8(%ebp),%eax
                                            mov
                 0f b6 00
                                            movzbl (%eax),%eax
80497da:
80497dd:
                 3c 2d
                                            cmp
                                                   $0x2d,%al
80497df:
                 74 50
                                                   8049831 <urlencode+0x80>
                                            jе
                                                   0x8(%ebp),%eax
80497e1:
                 8b 45 08
                                            mov
                 0f b6 00
                                                   (%eax),%eax
80497e4:
                                            movzbl
80497e7:
                 3c 2e
                                                   $0x2e,%al
                                            cmp
80497e9:
                 74 46
                                                   8049831 <urlencode+0x80>
                                            jе
                                                   0x8(%ebp),%eax
80497eb:
                 8b 45 08
                                            mov
                 0f b6 00
                                            movzbl (%eax),%eax
80497ee:
80497f1:
                 3c 5f
                                            cmp
                                                   $0x5f,%al
80497f3:
                 74 3c
                                                   8049831 <urlencode+0x80>
                                            ie
                                                   0x8(%ebp),%eax
80497f5:
                 8b 45 08
                                            mov
80497f8:
                 0f b6 00
                                            movzbl
                                                   (%eax),%eax
80497fb:
                 3c 2f
                                                   $0x2f,%al
                                            cmp
80497fd:
                 76 0a
                                            jbe
                                                   8049809 <urlencode+0x58>
80497ff:
                 8b 45 08
                                                   0x8(%ebp),%eax
                                            mov
8049802:
                 0f b6 00
                                            movzbl (%eax),%eax
8049805:
                 3с
                   39
                                                   $0x39,%al
                                            cmp
                 76 28
8049807:
                                            ibe
                                                   8049831 <urlencode+0x80>
                 8b 45 08
8049809:
                                                   0x8(%ebp),%eax
                                            mov
                 0f b6 00
804980c:
                                            movzbl (%eax),%eax
804980f:
                 3c 40
                                                   $0x40,%al
                                            cmp
8049811:
                 76 0a
                                                   804981d <urlencode+0x6c>
                                            jbe
8049813:
                 8b 45 08
                                                   0x8(%ebp),%eax
                                            mov
8049816:
                 0f b6 00
                                            movzbl (%eax),%eax
8049819:
                 3с
                   5a
                                            cmp
                                                   $0x5a,%al
804981b:
                 76 14
                                                   8049831 <urlencode+0x80>
                                            jbe
                 8b 45 08
804981d:
                                            mov
                                                   0x8(%ebp),%eax
8049820:
                 0f b6 00
                                            movzbl (%eax),%eax
8049823:
                 3c 60
                                            cmp
                                                   $0x60,%al
                 76 20
                                                   8049847 <urlencode+0x96>
8049825:
                                            ibe
                 8b 45 08
8049827:
                                            mov
                                                   0x8(%ebp), %eax
804982a:
                 0f b6 00
                                            movzbl
                                                   (%eax),%eax
804982d:
                 3c 7a
                                                   $0x7a,%al
                                            cmp
                 77 16
                                                   8049847 <urlencode+0x96>
804982f:
                                            ja
                                                   0xc(%ebp),%eax
0x1(%eax),%edx
8049831:
                 8b 45 0c
                                            mov
8049834:
                 8d 50 01
                                            lea
                 89 55 0c
                                                   %edx,0xc(%ebp)
8049837:
                                            mov
804983a:
                 8b 55 08
                                            mov
                                                   0x8(%ebp),%edx
804983d:
                 0f b6 12
                                            movzbl (%edx),%edx
8049840:
                 88 10
                                            mov
                                                   %dl,(%eax)
8049842:
                 e9 8a 00 00 00
                                                   80498d1 <urlencode+0x120>
                                            jmp
                 8b 45 08
8049847:
                                                   0x8(%ebp),%eax
                                            mov
804984a:
                 0f b6 00
                                            movzbl
                                                   (%eax),%eax
804984d:
                 3с
                   20
                                            cmp
                                                   $0x20,%al
804984f:
                 75 0e
                                                   804985f <urlencode+0xae>
                                            jne
                                                   0xc(%ebp),%eax
8049851:
                 8b 45 0c
                                            mov
8049854:
                 8d 50 01
                                            lea
                                                   0x1(%eax),%edx
8049857:
                 89 55 0c
                                                   %edx,0xc(%ebp)
                                            mov
                 c6 00 2b
804985a:
                                                   $0x2b,(%eax)
                                            movb
804985d:
                 eb 72
                                            jmp
                                                   80498d1 <urlencode+0x120>
804985f:
                 8b 45 08
                                                   0x8(%ebp),%eax
                                            mov
8049862:
                 0f b6 00
                                            movzbl
                                                   (%eax),%eax
                 3c 1f
8049865:
                                                   $0x1f,%al
                                            cmp
8049867:
                 76 0a
                                            jbe
                                                   8049873 <urlencode+0xc2>
8049869:
                 8b 45 08
                                                   0x8(%ebp),%eax
                                            mov
804986c:
                 0f b6 00
                                            movzbl (%eax),%eax
                                                   %al,%aĺ
804986f:
                 84 c0
                                            test
8049871:
                 79
                   0a
                                                   804987d <urlencode+0xcc>
                                            jns
8049873:
                 8b 45 08
                                                   0x8(%ebp),%eax
                                            mov
                                            movzbl (%eax),%eax
8049876:
                 0f b6 00
8049879:
                 3c 09
                                                   $0x9.%al
                                            cmp
                 75 4d
804987b:
                                            jne
                                                   80498ca <urlencode+0x119>
804987d:
                 8b
                   45 08
                                            mov
                                                   0x8(%ebp),%eax
8049880:
                 0f b6 00
                                            movzbl (%eax), %eax
8049883:
                 0f b6 c0
                                            movzbl %al,%eax
8049886:
                 83 ec 04
                                                   $0x4,%esp
                                            sub
8049889:
                 50
                                                   %eax
                                            push
804988a:
                 68 08 a8 04 08
                                                   $0x804a808
                                            push
804988f:
                 8d 45 ec
                                            lea
                                                    -0x14(%ebp),%eax
8049892:
                 50
                                            push
                                                   %eax
8049893:
                 e8 58 f1 ff ff
                                            call
                                                   80489f0 <sprintf@plt>
8049898:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                                                   0xc(%ebp),%eax
804989b:
                 8b 45 0c
                                            mov
804989e:
                 8d 50 01
                                            lea
                                                   0x1(%eax),%edx
```

```
80498a1:
                  89 55 0c
                                                     %edx,0xc(%ebp)
                                             mov
                  0f b6 55 ec
 80498a4:
                                             movzbl -0x14(%ebp),%edx
 80498a8:
                  88 10
                                             mov
                                                     %dl,(%eax)
 80498aa:
                  8b 45 0c
                                                     0xc(%ebp),%eax
                                             mov
 80498ad:
                  8d 50 01
                                             lea
                                                     0x1(%eax),%edx
                    55 0c
 80498b0:
                  89
                                             mov
                                                     %edx,0xc(%ebp)
 80498b3:
                  0f b6 55 ed
                                             movzbl
                                                     -0x13(%ebp),%edx
                  88 10
 80498b7:
                                             mov
                                                     %dl,(%eax)
                                                     0xc(%ebp),%eax
 80498b9:
                  8b 45 0c
                                             mov
                  8d 50 01
 80498bc:
                                             lea
                                                     0x1(%eax),%edx
 80498bf:
                  89
                    55 Øc
                                             mov
                                                     %edx,0xc(%ebp)
                  0f b6 55 ee
                                                    -0x12(%ebp),%edx
 80498c2:
                                             movzbl
                  88 10
 80498c6:
                                             mov
                                                     %dl,(%eax)
                  eb 07
 80498c8:
                                             jmp
                                                     80498d1 <urlencode+0x120>
 80498ca:
                  b8 ff ff ff ff
                                                     $0xffffffff,%eax
                                             mov
 80498cf:
                  eb 1a
                                                     80498eb <urlencode+0x13a>
                                             jmp
 80498d1:
                  83 45 08 01
                                                     $0x1,0x8(%ebp)
                                             addl
                  8b 45 f4
 80498d5:
                                             mov
                                                     -0xc(%ebp),%eax
 80498d8:
                  8d
                     50 ff
                                                     -0x1(%eax),%edx
                                             lea
                  89 55 f4
                                                     %edx,-0xc(%ebp)
 80498db:
                                             mov
                                                     %eax,%eax
 80498de:
                  85 c0
                                             test
                  0f 85 e7 fe ff ff
 80498e0:
                                             jne
                                                     80497cd <urlencode+0x1c>
 80498e6:
                  b8 00 00 00 00
                                                     $0x0,%eax
                                             mov
 80498eb:
                                             leave
                  c9
 80498ec:
                  c3
                                             ret
080498ed <submitr>:
 80498ed:
                 55
                                             push
                                                     %ebp
 80498ee:
                  89 e5
                                             mov
                                                     %esp,%ebp
 80498f0:
                  57
                                             push
                                                     %edi
 80498f1:
                  56
                                             push
                                                     %esi
 80498f2:
                  53
                                             push
                                                     %ehx
 80498f3:
                  81 ec 3c a0 00 00
                                             sub
                                                     $0xa03c,%esp
 80498f9:
                  c7 85 b8 7f ff ff 00
                                             movl
                                                     $0x0,-0x8048(%ebp)
 8049900:
                  00 00 00
 8049903:
                  83 ec 04
                                             sub
                                                     $0x4,%esp
 8049906:
                  6a 00
                                             push
                                                     $0x0
 8049908:
                  6a 01
                                             push
                                                     $0x1
 804990a:
                  6a 02
                                                     $0x2
                                             push
 804990c:
                  e8 ef f0 ff ff
                                                     8048a00 <socket@plt>
                                             call
                  83 c4 10
 8049911:
                                             add
                                                     $0x10,%esp
                                                     %eax,-0x1c(%ebp)
 8049914:
                  89 45 e4
                                             moν
                                                     $0x0,-0x1c(%ebp)
 8049917:
                  83 7d e4 00
                                             cmpl
                  79 51
 804991h:
                                                     804996e <submitr+0x81>
                                             jns
 804991d:
                  8b 45 20
                                                     0x20(%ebp),%eax
                                             mov
 8049920:
                  c7 00 45 72 72 6f
                                                     $0x6f727245,(%eax)
                                             movl
                  c7 40 04 72 3a 20 43
 8049926:
                                             movl
                                                     $0x43203a72,0x4(%eax)
                  c7 40 08 6c 69 65 6e
 804992d:
                                             movl
                                                     $0x6e65696c,0x8(%eax)
 8049934:
                  c7 40 0c 74 20 75 6e
                                             movl
                                                     $0x6e752074,0xc(%eax)
                  c7 40 10 61 62 6c 65
 804993b:
                                             movl
                                                     $0x656c6261,0x10(%eax)
                  c7 40 14 20 74 6f 20
                                                     $0x206f7420,0x14(%eax)
 8049942:
                                             movl
                  c7 40 18 63 72 65 61
 8049949:
                                             movl
                                                     $0x61657263,0x18(%eax)
 8049950:
                  c7 40 1c 74 65 20 73
                                                     $0x73206574,0x1c(%eax)
                                             movl
 8049957:
                  c7 40 20 6f 63 6b 65
                                             movl
                                                     $0x656b636f,0x20(%eax)
                  66 c7 40 24 74 00
 804995e:
                                             movw
                                                     $0x74,0x24(%eax)
 8049964:
                  b8 ff ff ff ff
                                             moν
                                                     $0xffffffff,%eax
 8049969:
                  e9 a3 05 00 00
                                                     8049f11 <submitr+0x624>
                                             jmp
 804996e:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
                  ff 75 08
                                             pushl
 8049971:
                                                     0x8(%ebp)
 8049974:
                  e8 a7 f0 ff ff
                                             call
                                                     8048a20 <gethostbyname@plt>
 8049979:
                  83 c4 10
                                                     $0x10,%esp
                                             add
                                                     %eax,-0x20(%ebp)
$0x0,-0x20(%ebp)
                  89 45 e0
 804997c:
                                             mov
                  83 7d e0 00
 804997f:
                                             cmpl
 8049983:
                  75 2e
                                             jne
                                                     80499b3 <submitr+0xc6>
 8049985:
                  83 ec 04
                                             sub
                                                     $0x4,%esp
 8049988:
                  ff
                    75 08
                                             pushl
                                                     0x8(%ebp)
                 68 10 a8 04 08
ff 75 20
 804998b:
                                             push
                                                     $0x804a810
 8049990:
                                                     0x20(%ebp)
                                             pushl
 8049993:
                  e8 58 f0 ff ff
                                             call
                                                     80489f0 <sprintf@plt>
 8049998:
                  83 c4 10
                                                     $0x10,%esp
                                             add
 804999b:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 804999e:
                  ff 75 e4
                                             pushl
                                                     -0x1c(%ebp)
 80499a1:
                  e8 9a f0 ff ff
                                             call
                                                     8048a40 <close@plt>
 80499a6:
                  83 c4 10
                                             add
                                                     $0x10,%esp
                  b8 ff ff ff ff
                                                     $0xffffffff,%eax
 80499a9:
                                             mov
 80499ae:
                 e9 5e 05 00 00
                                                     8049f11 <submitr+0x624>
                                             jmp
```

```
$0x8,%esp
80499b3:
                 83 ec 08
                                            sub
80499b6:
                 6a 10
                                            push
                                                    $0×10
80499b8:
                 8d 45 c8
                                            lea
                                                    -0x38(\%ebp),%eax
80499bb:
                 50
                                            push
                                                    %eax
                                                    8048860 <bzero@plt>
80499bc:
                 e8 9f ee ff ff
                                            call
                 83 c4 10
80499c1:
                                            add
                                                    $0x10,%esp
                 66 c7 45 c8 02 00
80499c4:
                                            movw
                                                    $0x2,-0x38(%ebp)
80499ca:
                 8b 45 e0
                                                    -0x20(%ebp),%eax
                                            mov
                 8b 40 0c
80499cd:
                                                    0xc(%eax),%eax
                                            mov
80499d0:
                 89 c2
                                            mov
                                                    %eax,%edx
80499d2:
                 8b 45 e0
                                            mov
                                                    -0x20(%ebp),%eax
                 8b 40 10
80499d5:
                                                    0x10(%eax),%eax
                                            mov
                 8b 00
80499d8:
                                                    (%eax),%eax
                                            mov
80499da:
                 83 ec 04
                                            sub
                                                    $0x4,%esp
80499dd:
                 52
                                            push
                                                    %edx
80499de:
                 8d 55 c8
                                             lea
                                                    -0x38(%ebp),%edx
                 83 c2 04
80499e1:
                                                    $0x4,%edx
                                            add
80499e4:
                 52
                                            push
                                                    %edx
80499e5:
                 50
                                            push
                                                    %eax
80499e6:
                 e8 d5 ee ff ff
                                            call
                                                    80488c0 <bcopy@plt>
                                                    $0x10,%esp
80499eb:
                 83 c4 10
                                            add
                 8b 45 0c
80499ee:
                                            mov
                                                    0xc(%ebp),%eax
80499f1:
                 0f b7 c0
                                                    %ax,%eax
                                            movzwl
80499f4:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
80499f7:
                 50
                                            push
                                                    %eax
80499f8:
                 e8 a3 ee ff ff
                                            call
                                                    80488a0 <htons@plt>
80499fd:
                 83 c4 10
                                            add
                                                    $0x10,%esp
                 66 89 45 ca
8049a00:
                                                    %ax,-0x36(%ebp)
                                            mov
8049a04:
                 83 ec 04
                                            sub
                                                    $0x4,%esp
8049a07:
                 6a 10
                                            push
                                                    $0x10
                                                    -0x38(%ebp),%eax
8049a09:
                 8d 45 c8
                                            lea
                 50
8049a0c:
                                            nush
                                                    %eax
                 ff 75 e4
8049a0d:
                                            pushl
                                                    -0x1c(%ebp)
8049a10:
                 e8 1b f0 ff ff
                                            call
                                                    8048a30 <connect@plt>
8049a15:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049a18:
                 85 c0
                                            test
                                                    %eax,%eax
                                            jns
8049a1a:
                 79 2e
                                                    8049a4a <submitr+0x15d>
8049a1c:
                 83
                    ec 04
                                            sub
                                                    $0x4,%esp
                 ff
                    75 08
                                                    0x8(%ebp)
8049a1f:
                                            pushl
                 68 3c a8 04 08
ff 75 20
8049a22:
                                            push
                                                    $0x804a83c
8049a27:
                                            pushl
                                                    0x20(%ebp)
8049a2a:
                 e8 c1 ef ff ff
                                            call
                                                    80489f0 <sprintf@plt>
8049a2f:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049a32:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
8049a35:
                 ff 75 e4
                                            pushl
                                                    -0x1c(%ebp)
8049a38:
                 e8 03 f0 ff ff
                                                    8048a40 <close@plt>
                                            call
8049a3d:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049a40:
                 b8 ff ff ff ff
                                                    $0xfffffffff,%eax
                                            mov
                 e9 c7 04 00 00
8049a45:
                                            jmp
                                                    8049f11 <submitr+0x624>
                 83 ec 0c
8049a4a:
                                            sub
                                                    $0xc,%esp
                                                    0x1c(%ebp)
                 ff 75 1c
                                            pushl
8049a4d:
                 e8 fb ee ff ff
8049a50:
                                            call
                                                    8048950 <strlen@plt>
8049a55:
                 83 c4 10
                                                    $0x10,%esp
                                            add
                                                    %eax,-0x24(%ebp)
$0xc,%esp
8049a58:
                 89 45 dc
                                            mov
8049a5b:
                 83 ec 0c
                                            sub
8049a5e:
                 ff 75 10
                                            pushl
                                                    0x10(%ebp)
8049a61:
                 e8 ea ee ff ff
                                                    8048950 <strlen@plt>
                                            call
8049a66:
                 83 c4 10
                                                    $0x10,%esp
                                            add
8049a69:
                 89 c3
                                            mov
                                                    %eax,%ebx
8049a6b:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
8049a6e:
                 ff 75 14
                                                    0x14(%ebp)
                                            pushl
                                                    8048950 <strlen@plt>
8049a71:
                 e8 da ee ff ff
                                            call
                 83 c4 10
8049a76:
                                            add
                                                    $0x10,%esp
8049a79:
                 01 c3
                                            add
                                                    %eax,%ebx
                                                    $0xc,%esp
0x18(%ebp)
8049a7b:
                 83 ec 0c
                                            sub
                 ff 75 18
                                            pushl
8049a7e:
                 e8 ca ee ff ff
8049a81:
                                            call
                                                    8048950 <strlen@plt>
8049a86:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049a89:
                 8d 0c 03
                                                    (%ebx,%eax,1),%ecx
                                            lea
                                                    -0x24(%ebp),%edx
8049a8c:
                 8b 55 dc
                                            mov
                 89 d0
8049a8f:
                                            mov
                                                    %edx,%eax
8049a91:
                 01 c0
                                            add
                                                    %eax,%eax
8049a93:
                 01 d0
                                            add
                                                    %edx,%eax
8049a95:
                 01 c8
                                                    %ecx,%eax
                                            add
                 83 e8 80
                                                    $0xffffff80,%eax
8049a97:
                                            sub
8049a9a:
                 89 45 d8
                                            mov
                                                    %eax,-0x28(%ebp)
```

```
8049a9d:
                81 7d d8 00 20 00 00
                                            cmpl
                                                    $0x2000,-0x28(%ebp)
8049aa4:
                 76 7c
                                                    8049b22 <submitr+0x235>
                                            ibe
                8b 45 20
8049aa6:
                                            mov
                                                    0x20(%ebp),%eax
8049aa9:
                 c7 00 45 72 72 6f
                                            movl
                                                    $0x6f727245, (%eax)
8049aaf:
                 c7 40 04 72 3a 20 52
                                            movl
                                                    $0x52203a72,0x4(%eax)
                 c7 40 08 65 73 75 6c
                                                    $0x6c757365,0x8(%eax)
8049ab6:
                                            movl
8049abd:
                 c7 40 0c 74 20 73 74
                                            movl
                                                    $0x74732074,0xc(%eax)
                                                    $0x676e6972,0x10(%eax)
$0x6f6f7420,0x14(%eax)
                 c7 40 10 72 69 6e 67
8049ac4:
                                            movl
8049acb:
                 c7 40 14 20 74 6f 6f
                                            movl
                 c7 40 18 20 6c 61 72
8049ad2:
                                            movl
                                                    $0x72616c20,0x18(%eax)
8049ad9:
                 c7 40 1c 67 65 2e 20
                                            movl
                                                    $0x202e6567,0x1c(%eax)
                c7 40 20 49 6e 63 72
8049ae0:
                                            movl
                                                    $0x72636e49,0x20(%eax)
                                                    $0x65736165,0x24(%eax)
                 c7 40 24 65 61 73 65
8049ae7:
                                            mov1
                 c7 40 28 20 53 55 42
8049aee:
                                            movl
                                                    $0x42555320,0x28(%eax)
8049af5:
                 c7 40 2c 4d 49 54 52
                                            movl
                                                    $0x5254494d,0x2c(%eax)
8049afc:
                 c7 40 30 5f 4d 41 58
                                            movl
                                                    $0x58414d5f,0x30(%eax)
8049h03:
                 c7 40 34 42 55 46 00
                                            mov1
                                                    $0x465542,0x34(%eax)
8049b0a:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
8049b0d:
                 ff
                    75 e4
                                                    -0x1c(%ebp)
                                            pushl
                 e8 2b ef ff ff
8049b10:
                                            call
                                                    8048a40 <close@plt>
                83 c4 10
b8 ff ff ff ff
8049b15:
                                            add
                                                    $0x10,%esp
8049b18:
                                            mov
                                                    $0xffffffff,%eax
8049b1d:
                 e9 ef 03 00 00
                                                    8049f11 <submitr+0x624>
                                            jmp
                 83 ec 08
8049b22:
                                            sub
                                                    $0x8,%esp
                 68 00 20 00 00
                                                    $0x2000
8049b25:
                                            push
8049b2a:
                 8d 85 bc 9f ff ff
                                            lea
                                                    -0x6044(%ebp),%eax
8049b30:
                 50
                                            push
                                                    %eax
                                                    8048860 <bzero@plt>
8049b31:
                 e8 2a ed ff ff
                                            call
8049b36:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049b39:
                 83 ec 08
                                                    $0x8,%esp
                                            sub
                 8d 85 bc 9f ff ff
                                                    -0x6044(%ebp),%eax
8049b3c:
                                            lea
                 50
8049h42:
                                            nush
                                                    %eax
                 ff 75 1c
8049b43:
                                            pushl
                                                    0x1c(%ebp)
8049b46:
                 e8 66 fc ff ff
                                                    80497b1 <urlencode>
                                            call
8049b4b:
                 83 c4 10
                                            add
                                                    $0x10,%esp
8049b4e:
                 85 c0
                                            test
                                                    %eax,%eax
8049b50:
                 79 4b
                                                    8049b9d < submitr + 0x2b0 >
                                            ins
8049b52:
                 8b 45 20
                                            mov
                                                    0x20(%ebp),%eax
8049b55:
                 bb 64 a8 04 08
                                                    $0x804a864,%ebx
                                            mov
8049b5a:
                 ba 43 00 00 00
                                            mov
                                                    $0x43,%edx
8049b5f:
                 8b 0b
                                            mov
                                                    (%ebx),%ecx
8049b61:
                 89 08
                                            mov
                                                    %ecx,(%eax)
                                                    -0x4(%ebx,%edx,1),%ecx
8049b63:
                 8b 4c 13 fc
                                            mov
                 89 4c 10 fc
                                                    %ecx,-0x4(%eax,%edx,1)
8049h67:
                                            mov
8049b6b:
                 8d 78 04
                                                    0x4(%eax),%edi
                                            lea
                 83 e7 fc
                                                    $0xfffffffc,%edi
8049b6e:
                                            and
                                                    %edi,%eax
                 29 f8
8049b71:
                                            sub
                 29 c3
                                                    %eax, %ebx
8049b73:
                                            sub
8049b75:
                 01 c2
                                            add
                                                    %eax,%edx
                 83 e2 fc
                                                    $0xfffffffc, %edx
8049b77:
                                            and
                 89 d0
8049b7a:
                                            mov
                                                    %edx,%eax
                 c1 e8 02
8049b7c:
                                            shr
                                                    $0x2,%eax
8049b7f:
                 89 de
                                                    %ebx,%esi
                                            mov
8049b81:
                 89 c1
                                            mov
                                                    %eax,%ecx
8049h83:
                 f3 a5
                                            rep movsl %ds:(%esi),%es:(%edi)
8049b85:
                 83 ec 0c
                                            sub
                                                    $0xc,%esp
8049b88:
                 ff
                    75 e4
                                                    -0x1c(%ebp)
                                            pushl
                                                    8048a40 <close@plt>
8049b8b:
                 e8 b0 ee ff ff
                                            call
                 83 c4 10
8049b90:
                                            add
                                                    $0x10,%esp
8049b93:
                 b8
                   ff ff ff ff
                                                    $0xffffffff,%eax
                                            mov
8049b98:
                 e9 74 03 00 00
                                            jmp
                                                    8049f11 <submitr+0x624>
8049b9d:
                 83 ec 08
                                            sub
                                                    $0x8,%esp
8049ha0:
                 8d 85 bc 9f ff ff
                                                    -0x6044(%ebp),%eax
                                            lea
8049ba6:
                 50
                                            push
                                                    %eax
8049ba7:
                 ff
                    75 18
                                            pushl
                                                    0x18(%ebp)
                 ff 75 14
                                                    0x14(%ebp)
8049baa:
                                            pushl
8049bad:
                 ff 75 10
                                            pushl
                                                    0x10(%ebp)
8049bb0:
                 68 a8 a8 04 08
                                                    $0x804a8a8
                                            push
8049bb5:
                 8d 85 bc bf ff ff
                                                    -0x4044(%ebp),%eax
                                            lea
8049hhh:
                 50
                                                    %eax
                                            push
                 e8 2f ee ff ff
                                                    80489f0 sprintf@plt>
8049bbc:
                                            call
8049bc1:
                 83 c4 20
                                            add
                                                    $0x20,%esp
8049bc4:
                 83 ec 0c
                                            sub
                                                    $0xc.%esp
                8d 85 bc bf ff ff
8049bc7:
                                                    -0x4044(%ebp),%eax
                                            lea
8049bcd:
                 50
                                            push
                                                    %eax
8049bce:
                e8 7d ed ff ff
                                            call
                                                    8048950 <strlen@plt>
```

```
8049bd3:
                83 c4 10
                                           add
                                                   $0x10,%esp
8049hd6:
                83 ec 04
                                            suh
                                                   $0x4,%esp
8049bd9:
                 50
                                            push
                                                   %eax
8049bda:
                 8d 85 bc bf ff ff
                                                   -0x4044(%ebp),%eax
                                            lea
8049be0:
                50
                                            push
                                                   %eax
                 ff
                                                   -0x1c(%ebp)
8049be1:
                   75 e4
                                            pushl
                 e8 64 fb ff ff
8049be4:
                                            call
                                                   804974d <rio_writen>
                 83 c4 10
8049be9:
                                            add
                                                   $0x10,%esp
8049bec:
                85 c0
                                                   %eax,%eax
                                            test
                79 67
8049bee:
                                            jns
                                                   8049c57 <submitr+0x36a>
                                                   0x20(%ebp),%eax
8049bf0:
                 8b 45 20
                                            mov
8049bf3:
                c7 00 45 72 72 6f
                                           movl
                                                   $0x6f727245,(%eax)
                 c7 40 04 72 3a 20 43
8049hf9:
                                           mov1
                                                   $0x43203a72,0x4(%eax)
8049c00:
                 c7 40 08 6c 69 65 6e
                                           movl
                                                   $0x6e65696c,0x8(%eax)
8049c07:
                 c7 40 0c 74 20 75 6e
                                           movl
                                                   $0x6e752074,0xc(%eax)
8049c0e:
                 c7 40 10 61 62 6c 65
                                           movl
                                                   $0x656c6261,0x10(%eax)
                                                   $0x206f7420,0x14(%eax)
                c7 40 14 20 74 6f 20
8049c15:
                                           movl
8049c1c:
                 c7 40 18 77 72 69 74
                                           movl
                                                   $0x74697277,0x18(%eax)
                                                   $0x6f742065,0x1c(%eax)
8049c23:
                 c7 40 1c 65 20 74 6f
                                           movl
                                                   $0x65687420,0x20(%eax)
8049c2a:
                c7 40 20 20 74 68 65
                                           movl
                 c7 40 24 20 73 65 72
                                                   $0x72657320,0x24(%eax)
8049c31:
                                           movl
8049c38:
                 c7 40 28 76 65 72 00
                                           movl
                                                   $0x726576,0x28(%eax)
8049c3f:
                 83 ec 0c
                                           sub
                                                   $0xc,%esp
8049c42:
                 ff
                   75 e4
                                            pushl
                                                   -0x1c(%ebp)
                 e8 f6 ed ff ff
8049c45:
                                                   8048a40 <close@plt>
                                            call
8049c4a:
                 83 c4 10
                                            add
                                                   $0x10,%esp
8049c4d:
                 b8 ff ff ff ff
                                           mov
                                                   $0xffffffff,%eax
                e9 ba 02 00 00
8049c52:
                                                   8049f11 <submitr+0x624>
                                            jmp
8049c57:
                 83 ec 08
                                            sub
                                                   $0x8,%esp
8049c5a:
                 ff
                   75 e4
                                                   -0x1c(%ebp)
                                            pushl
                 8d 85 bc df ff ff
8049c5d:
                                            lea
                                                   -0x2044(%ebp),%eax
                 50
                                           push
8049c63:
                                                   %eax
                 e8 78 f9 ff ff
8049c64:
                                            call
                                                   80495e1 <rio_readinitb>
8049c69:
                 83 c4 10
                                            add
                                                   $0x10,%esp
8049c6c:
                 83 ec 04
                                                   $0x4,%esp
                                            sub
                68 00 20 00 00
8049c6f:
                                                   $0x2000
                                            push
8049c74:
                 8d 85 bc bf ff ff
                                            lea
                                                   -0x4044(%ebp),%eax
8049c7a:
                 50
                                            push
                                                   %eax
                                                   -0x2044(%ebp),%eax
8049c7b:
                 8d 85 bc df ff ff
                                            lea
8049c81:
                50
                                            push
                                                   %eax
                e8 48 fa ff ff
8049c82:
                                            call
                                                   80496cf <rio_readlineb>
8049c87:
                 83 c4 10
                                            add
                                                   $0x10,%esp
8049c8a:
                85 c0
                                            test
                                                   %eax,%eax
                7f
                   7b
                                                   8049d09 <submitr+0x41c>
8049c8c:
                                            jg
8049c8e:
                8b 45 20
                                           mov
                                                   0x20(%ebp),%eax
                 c7 00 45 72 72 6f
                                                   $0x6f727245,(%eax)
8049c91:
                                           movl
                c7 40 04 72 3a 20 43
                                                   $0x43203a72,0x4(%eax)
8049c97:
                                           movl
8049c9e:
                 c7 40 08 6c 69 65 6e
                                           movl
                                                   $0x6e65696c,0x8(%eax)
8049ca5:
                 c7 40 0c 74 20 75 6e
                                           movl
                                                   $0x6e752074,0xc(%eax)
                c7 40 10 61 62 6c 65
8049cac:
                                           movl
                                                   $0x656c6261,0x10(%eax)
                                                   $0x206f7420,0x14(%eax)
                 c7 40 14 20 74 6f 20
8049cb3:
                                           movl
                 c7 40 18 72 65 61 64
8049cba:
                                           movl
                                                   $0x64616572,0x18(%eax)
8049cc1:
                 c7 40 1c 20 66 69 72
                                                   $0x72696620,0x1c(%eax)
                                           movl
8049cc8:
                 c7 40 20 73 74 20 68
                                           movl
                                                   $0x68207473,0x20(%eax)
8049ccf:
                c7 40 24 65 61 64 65
                                           movl
                                                   $0x65646165,0x24(%eax)
8049cd6:
                 c7 40 28 72 20 66 72
                                            movl
                                                   $0x72662072,0x28(%eax)
8049cdd:
                 c7 40 2c 6f 6d 20 73
                                                   $0x73206d6f,0x2c(%eax)
                                            movl
8049ce4:
                 c7 40 30 65 72 76 65
                                           movl
                                                   $0x65767265,0x30(%eax)
                 66 c7 40 34 72 00
                                           movw
8049ceb:
                                                   $0x72,0x34(%eax)
8049cf1:
                83 ec 0c
                                                   $0xc,%esp
                                            sub
8049cf4:
                 ff
                   75 e4
                                            pushl
                                                   -0x1c(%ebp)
                                                   8048a40 <close@plt>
8049cf7:
                 e8 44 ed ff ff
                                            call
                 83 c4 10
8049cfc:
                                           add
                                                   $0x10,%esp
8049cff:
                 b8 ff ff ff ff
                                            mov
                                                   $0xffffffff,%eax
8049d04:
                 e9 08 02 00 00
                                            jmp
                                                   8049f11 <submitr+0x624>
8049d09:
                 83 ec 0c
                                                   $0xc.%esp
                                            sub
                 8d 85 b8 5f ff ff
                                                   -0xa048(%ebp),%eax
8049d0c:
                                            lea
8049d12:
                 50
                                            push
                                                   -0x8048(%ebp),%eax
8049d13:
                8d 85 b8 7f ff ff
                                            lea
8049d19:
                                                   %eax
                 50
                                            push
                 8d 85 bc 7f ff ff
8049d1a:
                                            lea
                                                   -0x8044(%ebp),%eax
8049d20:
                 50
                                           push
                                                   %eax
8049d21:
                 68 f2 a8 04 08
                                                   $0x804a8f2
                                            push
8049d26:
                8d 85 bc bf ff ff
                                                   -0x4044(%ebp),%eax
                                            lea
8049d2c:
                 50
                                            push
                                                   %eax
8049d2d:
                e8 6e ec ff ff
                                            call
                                                   80489a0 < isoc99 sscanf@plt>
```

```
8049d32:
                83 c4 20
                                           add
                                                  $0x20,%esp
                8b 85 b8 7f ff ff
8049d35:
                                                   -0x8048(%ebp),%eax
                                           mov
8049d3b:
                3d c8 00 00 00
                                           cmp
                                                  $0xc8,%eax
8049d40:
                74 36
                                                  8049d78 <submitr+0x48b>
                                           jе
                                                  -0x8048(%ebp),%eax
8049d42:
                8b 85 b8 7f ff ff
                                           mov
                8d 95 b8 5f ff ff
8049d48:
                                           lea
                                                   -0xa048(%ebp),%edx
8049d4e:
                52
                                           push
                                                  %edx
8049d4f:
                50
                                           push
                                                  %eax
                                                  $0x804a904
8049d50:
                68 04 a9 04 08
                                           push
                                                  0x20(%ebp)
                   75 20
8049d55:
                ff
                                           pushl
8049d58:
                e8 93 ec ff ff
                                           call
                                                  8049d5d:
                83 c4 10
                                           add
                                                  $0x10,%esp
                83 ec 0c
8049d60:
                                           sub
                                                  $0xc,%esp
                   75 e4
                                                  -0x1c(%ebp)
8049d63:
                ff
                                           pushl
8049d66:
                e8 d5 ec ff ff
                                                  8048a40 <close@plt>
                                           call
8049d6b:
                83 c4 10
                                           add
                                                  $0x10,%esp
                b8 ff ff ff ff
8049d6e:
                                                  $0xffffffff,%eax
                                           mov
                                                  8049f11 <submitr+0x624>
8049d73:
                e9 99 01 00 00
                                           jmp
8049d78:
                e9
                   94 00 00 00
                                                  8049e11 <submitr+0x524>
                                           jmp
8049d7d:
                83 ec 04
                                           sub
                                                  $0x4,%esp
8049d80:
                68 00 20 00 00
                                                  $0x2000
                                           push
8049d85:
                8d 85 bc bf ff ff
                                           lea
                                                   -0x4044(%ebp),%eax
8049d8b:
                                           push
                                                  %eax
                                                   -0x2044(%ebp),%eax
8049d8c:
                8d 85 bc df ff ff
                                           lea
8049d92:
                50
                                           push
8049d93:
                e8 37 f9 ff ff
                                           call
                                                  80496cf <rio_readlineb>
8049d98:
                83 c4 10
                                           add
                                                  $0x10,%esp
8049d9b:
                85 c0
                                                  %eax,%eax
                                           test
8049d9d:
                7f 72
                                                  8049e11 <submitr+0x524>
                                           jg
8049d9f:
                8b 45 20
                                                  0x20(%ebp),%eax
                                           mov
                                                  $0x6f727245,(%eax)
                c7 00 45 72 72 6f
8049da2:
                                           movl
                c7 40 04 72 3a 20 43
8049da8:
                                           mov1
                                                  $0x43203a72,0x4(%eax)
                c7 40 08 6c 69 65 6e
8049daf:
                                           movl
                                                  $0x6e65696c,0x8(%eax)
8049db6:
                c7 40 0c 74 20 75 6e
                                           movl
                                                  $0x6e752074,0xc(%eax)
8049dbd:
                c7 40 10 61 62 6c 65
                                           movl
                                                  $0x656c6261,0x10(%eax)
8049dc4:
                c7 40 14 20 74 6f 20
                                                  $0x206f7420,0x14(%eax)
                                           movl
8049dcb:
                c7 40 18 72 65 61 64
                                           movl
                                                  $0x64616572,0x18(%eax)
8049dd2:
                c7 40 1c 20 68 65 61
                                           movl
                                                   $0x61656820,0x1c(%eax)
                                                  $0x73726564,0x20(%eax)
8049dd9:
                c7 40 20 64 65 72 73
                                           movl
                                                  $0x6f726620,0x24(%eax)
                c7 40 24 20 66 72 6f
8049de0:
                                           movl
8049de7:
                c7 40 28 6d 20 73 65
                                           movl
                                                  $0x6573206d,0x28(%eax)
8049dee:
                c7 40 2c 72 76 65 72
                                           movl
                                                  $0x72657672,0x2c(%eax)
                                                  $0x0,0x30(%eax)
8049df5:
                c6 40 30 00
                                           movb
8049df9:
                83 ec 0c
                                           sub
                                                  $0xc,%esp
8049dfc:
                ff 75 e4
                                           pushl
                                                  -0x1c(%ebp)
                e8 3c ec ff ff
                                                  8048a40 <close@plt>
8049dff:
                                           call
8049e04:
                83 c4 10
                                           add
                                                  $0x10,%esp
                b8 ff ff ff ff
                                                  $0xfffffffff,%eax
8049e07:
                                           mov
8049e0c:
                e9 00 01 00 00
                                           jmp
                                                  8049f11 <submitr+0x624>
8049e11:
                83 ec 08
                                           sub
                                                  $0x8,%esp
                68
                   31 a9 04 08
                                                  $0x804a931
8049e14:
                                           push
8049e19:
                8d 85 bc bf ff ff
                                           lea
                                                  -0x4044(%ebp),%eax
8049e1f:
                50
                                           push
                                                  %eax
8049e20:
                e8 db e9 ff ff
                                           call
                                                  8048800 <strcmp@plt>
                83 c4 10
8049e25:
                                                  $0x10,%esp
                                           add
8049e28:
                85 c0
                                           test
                                                  %eax,%eax
8049e2a:
                0f
                   85 4d ff ff ff
                                                  8049d7d <submitr+0x490>
                                           ine
8049e30:
                83 ec 04
                                                  $0x4,%esp
                                           sub
                68 00 20 00 00
8049e33:
                                           push
                                                  $0x2000
8049e38:
                8d 85 bc bf ff ff
                                           lea
                                                   -0x4044(%ebp),%eax
8049e3e:
                                           push
                                                  %eax
                                                   -0x2044(%ebp),%eax
8049e3f:
                8d 85 bc df ff ff
                                           lea
8049e45:
                50
                                           push
                e8 84 f8 ff ff
8049e46:
                                           call
                                                  80496cf <rio_readlineb>
8049e4b:
                83 c4 10
                                           add
                                                  $0x10,%esp
8049e4e:
                85 c0
                                                  %eax,%eax
                                           test
8049e50:
                7f 79
                                           jq
                                                  8049ecb <submitr+0x5de>
8049e52:
                8b 45 20
                                                  0x20(%ebp),%eax
                                           mov
                                                  $0x6f727245,(%eax)
8049e55:
                c7 00 45 72 72 6f
                                           movl
                c7 40 04 72 3a 20 43
8049e5h:
                                           movl
                                                  $0x43203a72,0x4(%eax)
                c7 40 08 6c 69 65 6e
8049e62:
                                           movl
                                                  $0x6e65696c,0x8(%eax)
8049e69:
                c7 40 0c 74 20 75 6e
                                           movl
                                                  $0x6e752074,0xc(%eax)
8049e70:
                c7 40 10 61 62 6c 65
                                           movl
                                                  $0x656c6261,0x10(%eax)
8049e77:
                c7 40 14 20 74 6f 20
                                           movl
                                                  $0x206f7420,0x14(%eax)
8049e7e:
                c7 40 18 72 65 61 64
                                           movl
                                                  $0x64616572,0x18(%eax)
8049e85:
                c7 40 1c 20 73 74 61
                                           movl
                                                  $0x61747320,0x1c(%eax)
```

```
8049e8c:
                  c7 40 20 74 75 73 20
                                             movl
                                                     $0x20737574,0x20(%eax)
                  c7 40 24 6d 65 73 73
 8049e93:
                                                     $0x7373656d,0x24(%eax)
                                             mov1
                  c7 40 28 61 67 65 20
 8049e9a:
                                             movl
                                                     $0x20656761,0x28(%eax)
 8049ea1:
                  c7 40 2c 66 72 6f 6d
                                             movl
                                                     $0x6d6f7266,0x2c(%eax)
                  c7 40 30 20 73 65 72
c7 40 34 76 65 72 00
 8049ea8:
                                             movl
                                                     $0x72657320,0x30(%eax)
 8049eaf:
                                             movl
                                                     $0x726576,0x34(%eax)
 8049eb6:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
                                             pushl
 8049eb9:
                  ff
                     75 e4
                                                     -0x1c(%ebp)
                  e8 7f eb ff ff
 8049ebc:
                                             call
                                                     8048a40 <close@plt>
 8049ec1:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049ec4:
                  b8 ff ff ff ff
                                             mov
                                                     $0xffffffff,%eax
                  eb 46
 8049ec9:
                                                     8049f11 <submitr+0x624>
                                             dmi
                  83 ec 08
                                                     $0x8,%esp
 8049ech:
                                             sub
 8049ece:
                  8d 85 bc bf ff ff
                                             lea
                                                     -0x4044(%ebp),%eax
 8049ed4:
                  50
                                                     %eax
                                             push
 8049ed5:
                  ff
                     75 20
                                             pushl
                                                     0x20(%ebp)
                                                     80488d0 <strcpy@plt>
 8049ed8:
                  e8 f3 e9 ff ff
                                             call
 8049edd:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049ee0:
                  83 ec 0c
                                                     $0xc,%esp
                                             sub
                  ff
                     75 e4
                                                     -0x1c(%ebp)
 8049ee3:
                                             pushl
                  e8 55 eb ff ff
 8049ee6:
                                             call
                                                     8048a40 <close@plt>
 8049eeb:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049eee:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
 8049ef1:
                  68 34 a9 04 08
                                                     $0x804a934
                                             push
                     75 20
 8049ef6:
                  ff
                                                     0x20(%ebp)
                                             pushl
 8049ef9:
                  e8 02 e9 ff ff
                                             call
                                                     8048800 <strcmp@plt>
 8049efe:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049f01:
                  85 c0
                                                     %eax,%eax
                                             test
 8049f03:
                  75 07
                                             jne
                                                     8049f0c < submitr + 0x61f >
                                                     $0x0,%eax
 8049f05:
                  b8 00 00 00 00
                                             mov
                                                     8049f11 <submitr+0x624>
 8049f0a:
                  eb 05
                                             ami
                                                     $0xffffffff,%eax
                  b8 ff ff ff ff
 8049f0c:
                                             mov
                  8d 65 f4
 8049f11:
                                             lea
                                                     -0xc(%ebp),%esp
 8049f14:
                  5b
                                                     %ebx
                                             pop
 8049f15:
                  5e
                                                     %esi
                                             gog
 8049f16:
                  5f
                                             pop
                                                     %edi
 8049f17:
                  5d
                                                     %ebp
                                             pop
 8049f18:
                  с3
                                             ret
08049f19 <init_timeout>:
 8049f19:
                  55
                                             push
                                                     %ebp
 8049f1a:
                  89 e5
                                             mov
                                                     %esp,%ebp
                                                     $0x8,%esp
$0x0,0x8(%ebp)
 8049f1c:
                  83 ec 08
                                             sub
                  83 7d 08 00
 8049f1f:
                                             cmpl
 8049f23:
                  75 02
                                             jne
                                                     8049f27 <init_timeout+0xe>
 8049f25:
                  eb 2e
                                                     8049f55 <init_timeout+0x3c>
                                             jmp
 8049f27:
                  83 7d 08 00
                                                     $0x0,0x8(%ebp)
                                             cmpl
                  79 07
                                                     8049f34 <init_timeout+0x1b>
 8049f2b:
                                             jns
 8049f2d:
                  c7 45 08 05 00 00 00
                                             movl
                                                     $0x5,0x8(%ebp)
                  83 ec 08
 8049f34:
                                             sub
                                                     $0x8,%esp
                  68 bf 95 04 08
                                                     $0x80495bf
 8049f37:
                                             push
 8049f3c:
                  6a 0e
                                             push
                                                     $0xe
 8049f3e:
                  e8 2d e9 ff ff
                                                     8048870 <signal@plt>
                                             call
 8049f43:
                  83 c4 10
                                             add
                                                     $0x10,%esp
                  8b 45 08
 8049f46:
                                                     0x8(%ebp), %eax
                                             mov
 8049f49:
                  83 ec 0c
                                             sub
                                                     $0xc,%esp
 8049f4c:
                  50
                                             push
                                                     %eax
 8049f4d:
                  e8 2e e9 ff ff
                                             call
                                                     8048880 <alarm@plt>
 8049f52:
                                             add
                                                     $0x10,%esp
                  83 c4 10
 8049f55:
                  с9
                                             leave
 8049f56:
                                             ret
08049f57 <init_driver>:
 8049f57:
                  55
                                             push
                                                     %ebp
 8049f58:
                  89 e5
                                             mov
                                                     %esp,%ebp
 8049f5a:
                                                     $0x28,%esp
                  83 ec 28
                                             sub
                  c7 45 f4 37 a9 04 08
 8049f5d:
                                             movl
                                                     $0x804a937,-0xc(%ebp)
 8049f64:
                  c7 45 f0 10 4b 00 00
                                                     $0x4b10,-0x10(%ebp)
                                             movl
 8049f6b:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
                  6a 01
 8049f6e:
                                             push
                                                     $0x1
                  6a 0d
 8049f70:
                                             push
                                                     $0xd
 8049f72:
                  e8 f9 e8 ff ff
                                             call
                                                     8048870 <signal@plt>
 8049f77:
                  83 c4 10
                                             add
                                                     $0x10,%esp
 8049f7a:
                  83 ec 08
                                                     $0x8,%esp
                                             sub
 8049f7d:
                  6a 01
                                             push
                                                     $0x1
 8049f7f:
                  6a 1d
                                             push
                                                     $0x1d
```

```
8049f81:
                 e8 ea e8 ff ff
                                            call
                                                   8048870 <signal@plt>
8049f86:
                 83 c4 10
                                            bhs
                                                   $0x10,%esp
8049f89:
                 83 ec 08
                                            sub
                                                   $0x8,%esp
8049f8c:
                 6a 01
                                            push
                                                   $0x1
8049f8e:
                 6a 1d
                                                   $0x1d
                                            push
                 e8 db e8 ff ff
                                                   8048870 <signal@plt>
8049f90:
                                            call
8049f95:
                 83 c4 10
                                            add
                                                   $0x10,%esp
8049f98:
                 83 ec 04
                                            sub
                                                    $0x4,%esp
8049f9b:
                 6a 00
                                            push
                                                   $0x0
                 6a 01
8049f9d:
                                            push
                                                   $0x1
8049f9f:
                 6a 02
                                            push
                                                   $0x2
                e8 5a ea ff ff
                                                   8048a00 <socket@plt>
8049fa1:
                                            call
8049fa6:
                 83 c4 10
                                            add
                                                   $0x10,%esp
8049fa9:
                 89 45 ec
                                                   %eax,-0x14(%ebp)
                                            moν
8049fac:
                 83 7d ec 00
                                            cmpl
                                                   $0x0,-0x14(%ebp)
8049fb0:
                 79 51
                                                   804a003 <init_driver+0xac>
                                            ins
                                                   0x8(%ebp),%eax
8049fb2:
                8b 45 08
                                            mov
                 c7 00 45 72 72 6f
8049fb5:
                                            movl
                                                   $0x6f727245,(%eax)
8049fbb:
                 c7 40 04 72 3a 20 43
                                                   $0x43203a72,0x4(%eax)
                                            movl
                                                   $0x6e65696c,0x8(%eax)
                 c7 40 08 6c 69 65 6e
8049fc2:
                                            movl
                                                   $0x6e752074,0xc(%eax)
                 c7 40 0c 74 20 75 6e
8049fc9:
                                            movl
8049fd0:
                 c7 40 10 61 62 6c 65
                                            movl
                                                   $0x656c6261,0x10(%eax)
8049fd7:
                 c7 40 14 20 74 6f 20
                                                   $0x206f7420,0x14(%eax)
                                            movl
8049fde:
                 c7 40 18 63 72 65 61
                                            movl
                                                   $0x61657263,0x18(%eax)
8049fe5:
                 c7 40 1c 74 65 20 73
                                            movl
                                                   $0x73206574,0x1c(%eax)
8049fec:
                 c7 40 20 6f 63 6b 65
                                            movl
                                                   $0x656b636f,0x20(%eax)
8049ff3:
                 66 c7 40 24 74 00
                                            movw
                                                   $0x74,0x24(%eax)
                b8 ff ff ff ff
8049ff9:
                                                   $0xffffffff,%eax
                                            mov
                 e9 f8 00 00 00
8049ffe:
                                            jmp
                                                   804a0fb <init_driver+0x1a4>
804a003:
                 83 ec 0c
                                                   $0xc,%esp
                                            sub
                   75 f4
                                                   -0xc(%ebp)
804a006:
                 ff
                                            pushl
804a009:
                 e8 12 ea ff ff
                                                   8048a20 <gethostbyname@plt>
                                            call
804a00e:
                 83 c4 10
                                            add
                                                   $0x10,%esp
804a011:
                 89 45 e8
                                                   %eax,-0x18(%ebp)
                                            mov
                                                   $0x0,-0x18(%ebp)
804a048 <init_driver+0xf1>
                 83 7d e8 00
804a014:
                                            cmpl
804a018:
                 75 2e
                                            ine
804a01a:
                 83 ec 04
                                            sub
                                                   $0x4,%esp
804a01d:
                 ff
                    75 f4
                                            pushl
                                                   -0xc(%ebp)
                 68 10 a8 04 08
804a020:
                                            push
                                                   $0x804a810
                                                   0x8(%ebp)
                                            pushl
804a025:
                 ff 75 08
804a028:
                 e8 c3 e9 ff ff
                                            call
                                                   80489f0 <sprintf@plt>
804a02d:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                                                   $0xc,%esp
-0x14(%ebp)
804a030:
                 83 ec 0c
                                            sub
                   75 ec
                 ff
                                            pushl
804a033:
804a036:
                 e8 05 ea ff ff
                                            call
                                                   8048a40 <close@plt>
804a03b:
                 83 c4 10
                                            add
                                                   $0x10,%esp
804a03e:
                 b8 ff ff ff ff
                                                   $0xffffffff,%eax
                                            mov
                 e9 b3 00 00 00
804a043:
                                                   804a0fb <init_driver+0x1a4>
                                            jmp
804a048:
                 83 ec 08
                                            sub
                                                   $0x8,%esp
804a04b:
                 6a 10
                                            push
                                                   $0x10
804a04d:
                 8d 45 d8
                                                    -0x28(%ebp),%eax
                                            lea
804a050:
                 50
                                            push
                                                   %eax
804a051:
                 e8 0a e8 ff ff
                                                   8048860 <bzero@plt>
                                            call
804a056:
                 83 c4 10
                                            add
                                                   $0x10,%esp
                                                   $0x2,-0x28(%ebp)
                 66 c7 45 d8 02 00
804a059:
                                            movw
                                                    -0x18(%ebp),%eax
804a05f:
                 8b 45 e8
                                            moν
804a062:
                 8b 40 0c
                                                   0xc(%eax),%eax
                                            mov
804a065:
                 89 c2
                                                   %eax.%edx
                                            mov
                 8b 45 e8
804a067:
                                                   -0x18(%ebp),%eax
                                            mov
804a06a:
                 8b 40 10
                                            mov
                                                   0x10(%eax),%eax
804a06d:
                 8b 00
                                            mov
                                                    (%eax),%eax
804a06f:
                 83 ec 04
                                                   $0x4,%esp
                                            sub
804a072:
                 52
                                            push
                                                   %edx
                 8d 55 d8
804a073:
                                            lea
                                                    -0x28(\%ebp),%edx
804a076:
                 83 c2 04
                                            add
                                                   $0x4,%edx
804a079:
                 52
                                            push
                                                   %edx
804a07a:
                 50
                                            push
                                                   %eax
804a07b:
                 e8 40 e8 ff ff
                                            call
                                                   80488c0 <bcopy@plt>
804a080:
                 83 c4 10
                                            add
                                                   $0x10.%esp
                 8b 45 f0
804a083:
                                                    -0x10(%ebp),%eax
                                            mov
                 0f b7 c0
                                            movzwl %ax, %eax
804a086:
804a089:
                 83 ec 0c
                                            sub
                                                   $0xc,%esp
804a08c:
                 50
                                            push
                                                   %eax
                                                   80488a0 <htons@plt>
804a08d:
                 e8 0e e8 ff ff
                                            call
804a092:
                 83 c4 10
                                            add
                                                   $0x10,%esp
804a095:
                 66 89 45 da
                                                   ax,-0x26(%ebp)
                                            mov
```

```
$0x4,%esp
 804a099:
                 83 ec 04
                                             sub
 804a09c:
                  6a 10
                                             push
                                                    $0x10
 804a09e:
                 8d 45 d8
                                             lea
                                                    -0x28(%ebp),%eax
 804a0a1:
                 50
                                             push
                                                    %eax
                  ff 75 ec
 804a0a2:
                                             pushl
                                                    -0x14(%ebp)
                                                    8048a30 <connect@plt>
                  e8 86 e9 ff ff
 804a0a5:
                                             call
 804a0aa:
                 83 c4 10
                                             add
                                                    $0x10,%esp
 804a0ad:
                 85 c0
                                             test
                                                    %eax,%eax
                 79 2b
                                                    804a0dc <init_driver+0x185>
 804a0af:
                                             ins
                                                    -0x10(%ebp)
 804a0b1:
                  ff 75 f0
                                             pushl
 804a0b4:
                  ff
                    75 f4
                                             pushl
                                                    -0xc(%ebp)
                 68 4c a9 04 08
                                                    $0x804a94c
 804a0b7:
                                             push
                  ff 75 08
 804a0bc:
                                                    0x8(%ebp)
                                             pushl
 804a0bf:
                 e8 2c e9 ff ff
                                                    80489f0 sprintf@plt>
                                             call
 804a0c4:
                 83 c4 10
                                             add
                                                    $0x10,%esp
 804a0c7:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
                                                    -0x14(%ebp)
                 ff 75 ec
 804a0ca:
                                             pushl
                 e8 6e e9 ff ff
                                                    8048a40 <close@plt>
 804a0cd:
                                             call
 804a0d2:
                 83 c4 10
                                                    $0x10,%esp
                                             add
                 b8 ff ff ff ff
                                                    $0xffffffff,%eax
 804a0d5:
                                            mov
 804a0da:
                 eb 1f
                                                    804a0fb <init_driver+0x1a4>
                                             jmp
 804a0dc:
                 83 ec 0c
                                             sub
                                                    $0xc,%esp
 804a0df:
                  ff 75 ec
                                             pushl
                                                    -0x14(%ebp)
 804a0e2:
                 e8 59 e9 ff ff
                                                    8048a40 <close@plt>
                                             call
                 83 c4 10
 804a0e7:
                                                    $0x10,%esp
                                            add
 804a0ea:
                 8b 45 08
                                             mov
                                                    0x8(%ebp),%eax
 804a0ed:
                 66 c7 00 4f 4b
                                            movw
                                                    $0x4b4f, (%eax)
                                                    $0x0,0x2(%eax)
 804a0f2:
                 c6 40 02 00
                                            movb
 804a0f6:
                 b8 00 00 00 00
                                             mov
                                                    $0x0,%eax
 804a0fb:
                  c9
                                             leave
 804a0fc:
                 c3
                                             ret
0804a0fd <driver_post>:
 804a0fd:
                 55
                                             push
                                                    %ebp
 804a0fe:
                 89 e5
                                                    %esp,%ebp
                                            mov
 804a100:
                 83 ec 18
                                                    $0x18,%esp
                                             sub
                                                    $0x0,0x10(%ebp)
 804a103:
                 83 7d 10 00
                                             cmpl
                                                    804a12f <driver_post+0x32>
 804a107:
                 74 26
                                             jе
 804a109:
                 83 ec 08
                                             sub
                                                    $0x8,%esp
                                             pushl
                  ff 75 0c
                                                    0xc(%ebp)
 804a10c:
                 68 75 a9 04 08
                                                    $0x804a975
 804a10f:
                                             push
 804a114:
                 e8 17 e7 ff ff
                                             call
                                                    8048830 <printf@plt>
 804a119:
                 83 c4 10
                                                    $0x10,%esp
                                             add
                 8b 45 14
 804a11c:
                                                    0x14(%ebp),%eax
                                            mov
 804a11f:
                 66 c7 00 4f 4b
                                             movw
                                                    $0x4b4f,(%eax)
                  c6 40 02 00
 804a124:
                                            movb
                                                    $0x0,0x2(%eax)
                 b8 00 00 00 00
 804a128:
                                                    $0x0,%eax
                                            mov
                 eb 51
83 7d 08 00
                                                    804a180 <driver_post+0x83>
 804a12d:
                                             jmp
 804a12f:
                                             cmpl
                                                    $0x0,0x8(%ebp)
 804a133:
                 74 3a
                                                    804a16f <driver_post+0x72>
                                             ie
                 8b 45 08
                                                    0x8(%ebp),%eax
 804a135:
                                             mov
                 0f b6 00
 804a138:
                                            movzbl (%eax),%eax
 804a13b:
                 84 c0
                                                    %al,%al
                                             test
 804a13d:
                  74 30
                                                    804a16f <driver_post+0x72>
                                             jе
                 83 ec 04
 804a13f:
                                             sub
                                                    $0x4,%esp
 804a142:
                  ff 75 14
                                             pushl
                                                    0x14(%ebp)
 804a145:
                  ff
                    75 0c
                                             pushl
                                                    0xc(%ebp)
                                                    $0x804a98c
 804a148:
                 68 8c a9 04 08
                                             push
                  ff 75 08
 804a14d:
                                             pushl
                                                    0x8(%ebp)
 804a150:
                 68 93 a9 04 08
                                             push
                                                    $0x804a993
 804a155:
                 68 10 4b 00 00
                                             push
                                                    $0x4b10
 804a15a:
                 68 37 a9 04 08
                                             push
                                                    $0x804a937
                 e8 89 f7 ff ff
 804a15f:
                                                    80498ed <submitr>
                                             call
 804a164:
                 83 c4 20
                                             add
                                                    $0x20,%esp
                 89 45 f4
 804a167:
                                            mov
                                                    %eax,-0xc(%ebp)
                                                    -0xc(%ebp),%eax
                 8b 45 f4
 804a16a:
                                            mov
                                                    804a180 <driver_post+0x83>
 804a16d:
                  eb 11
                                             jmp
 804a16f:
                 8b 45 14
                                                    0x14(%ebp),%eax
                                             mov
 804a172:
                 66 c7 00 4f 4b
                                                    $0x4b4f,(%eax)
                                            movw
                  c6 40 02 00
                                             movh
                                                    $0x0,0x2(%eax)
 804a177:
                 b8 00 00 00 00
 804a17b:
                                            mov
                                                    $0x0,%eax
 804a180:
                 c9
                                             leave
 804a181:
                  с3
                                             ret
0804a182 <hash>:
 804a182:
                                             push
                                                    %ebp
```

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804a183:
                  89 e5
                                                    %esp,%ebp
                                             mov
 804a185:
                  83 ec 10
                                             suh
                                                    $0x10,%esp
                  c7 45 fc 00 00 00 00
 804a188:
                                             movl
                                                    $0x0,-0x4(\%ebp)
 804a18f:
                  eb 1a
                                                    804a1ab <hash+0x29>
                                             jmp
                  8b 45 fc
 804a191:
                                                    -0x4(%ebp),%eax
                                             mov
                  6b c8 67
                                                    $0x67,%eax,%ecx
 804a194:
                                             imul
                  8b 45 08
 804a197:
                                             mov
                                                    0x8(%ebp),%eax
                                                    0x1(%eax),%edx
 804a19a:
                  8d 50 01
                                             lea
                  89 55 08
                                                    %edx,0x8(%ebp)
 804a19d:
                                             mov
                  0f b6 00
                                             movzbl (%eax),%eax
 804a1a0:
 804a1a3:
                  0f be c0
                                             movsbl %al,%eax
 804a1a6:
                  01 c8
                                             add
                                                    %ecx,%eax
                                                    %eax,-0x4(%ebp)
                  89 45 fc
 804a1a8:
                                             mov
                  8b 45 08
 804a1ab:
                                             mov
                                                    0x8(%ebp),%eax
 804a1ae:
                  0f b6 00
                                             movzbl (%eax),%eax
 804a1b1:
                  84 c0
                                             test
                                                    %al,%aĺ
 804a1b3:
                  75 dc
                                                    804a191 <hash+0xf>
                                             jne
                  8b 45 fc
 804a1b5:
                                             mov
                                                    -0x4(%ebp),%eax
 804a1b8:
                  с9
                                             leave
 804a1b9:
                  с3
                                             ret
0804a1ba <check>:
 804a1ba:
                  55
                                             push
                                                    %ebp
 804a1bb:
                  89 e5
                                             mov
                                                    %esp,%ebp
 804a1bd:
                  83 ec 10
                                                    $0x10,%esp
                                             sub
 804a1c0:
                  8b 45 08
                                             mov
                                                    0x8(%ebp),%eax
 804a1c3:
                  c1 e8 1c
                                             shr
                                                    $0x1c,%eax
                                                    %eax,%eax
 804a1c6:
                  85 c0
                                             test
 804a1c8:
                  75 07
                                             jne
                                                    804a1d1 <check+0x17>
 804a1ca:
                  b8 00 00 00 00
                                             mov
                                                    $0x0,%eax
                 eb 33
                                                    804a204 <check+0x4a>
 804a1cf:
                                             ami
                  c7 45 fc 00 00 00 00
                                             movl
 804a1d1:
                                                    $0x0,-0x4(%ebp)
                  eb 1f
 804a1d8:
                                             jmp
                                                    804a1f9 <check+0x3f>
 804a1da:
                  8b 45 fc
                                                     -0x4(%ebp),%eax
                                             mov
                  8b 55 08
 804a1dd:
                                                    0x8(%ebp),%edx
                                             mov
                  89 c1
 804a1e0:
                                             mov
                                                    %eax,%ecx
 804a1e2:
                  d3 ea
                                             shr
                                                    %cl,%edx
 804a1e4:
                  89
                    d0
                                             mov
                                                    %edx,%eax
                  0f b6 c0
 804a1e6:
                                             movzbl %al,%eax
                  83 f8 0a
 804a1e9:
                                             cmp
                                                    $0xa,%eax
 804a1ec:
                  75 07
                                             jne
                                                    804a1f5 <check+0x3b>
 804a1ee:
                  b8 00 00 00 00
                                             mov
                                                    $0x0,%eax
 804a1f3:
                  eb 0f
                                                    804a204 <check+0x4a>
                                             jmp
                                                    $0x8,-0x4(%ebp)
 804a1f5:
                  83 45 fc 08
                                             addl
 804a1f9:
                  83 7d fc 1f
                                             cmpl
                                                    $0x1f,-0x4(%ebp)
 804a1fd:
                  7e db
                                                    804a1da <check+0x20>
                                             jle
                  b8 01 00 00 00
 804a1ff:
                                             mov
                                                    $0x1,%eax
 804a204:
                  c9
                                             leave
 804a205:
                  c3
                                             ret
0804a206 <gencookie>:
 804a206:
                  55
                                             push
                                                    %ebp
 804a207:
                  89 e5
                                                    %esp,%ebp
                                             mov
 804a209:
                  83 ec 18
                                             sub
                                                    $0x18,%esp
 804a20c:
                  ff 75 08
                                             pushl
                                                    0x8(%ebp)
 804a20f:
                  e8 6e ff ff ff
                                             call
                                                    804a182 <hash>
 804a214:
                  83 c4 04
                                                    $0x4,%esp
                                             add
 804a217:
                  83 ec 0c
                                                    $0xc,%esp
                                             sub
 804a21a:
                  50
                                             push
                                                    %eax
 804a21b:
                  e8 10 e7 ff ff
                                             call
                                                    8048930 <srand@plt>
 804a220:
                  83 c4 10
                                             add
                                                    $0x10,%esp
                                                    80489d0 <rand@plt>
                  e8 a8 e7 ff ff
 804a223:
                                             call
 804a228:
                  89 45 f4
                                                    %eax,-0xc(%ebp)
                                             mov
 804a22b:
                  83 ec 0c
                                             sub
                                                    $0xc,%esp
                  ff
                     75 f4
                                                    -0xc(%ebp)
 804a22e:
                                             pushl
                  e8 84 ff ff ff
                                                    804a1ba <check>
 804a231:
                                             call
 804a236:
                  83 c4 10
                                             add
                                                    $0x10,%esp
 804a239:
                  85 c0
                                             test
                                                    %eax,%eax
 804a23b:
                  74 e6
                                             jе
                                                    804a223 <gencookie+0x1d>
                  8b 45 f4
                                             mov
                                                     -0xc(%ebp),%eax
 804a23d:
 804a240:
                  c9
                                             leave
 804a241:
                  с3
                                             ret
                  66 90
 804a242:
                                                    %ax,%ax
                                             xchg
 804a244:
                  66 90
                                                    %ax,%ax
                                             xchg
 804a246:
                  66 90
                                             xchg
                                                    %ax,%ax
 804a248:
                  66 90
                                             xchg
                                                    %ax,%ax
```

```
804a24a:
                 66 90
                                            xchq
                                                    %ax,%ax
 804a24c:
                 66 90
                                            xchg
                                                    %ax,%ax
 804a24e:
                 66 90
                                             xchg
                                                    %ax,%ax
0804a250 <__libc_csu_init>:
                 55
 804a250:
                                            push
                                                    %ebp
                 57
 804a251:
                                             push
                                                    %edi
 804a252:
                 31 ff
                                                    %edi,%edi
                                            xor
 804a254:
                 56
                                            push
                                                    %esi
 804a255:
                 53
                                             push
                                                    %ebx
                 e8 35 e8 ff ff
 804a256:
                                             call
                                                    8048a90 <__x86.get_pc_thunk.bx>
 804a25b:
                 81 c3 9d 0e 00 00
                                                    $0xe9d,%ebx
                                            add
                                                    $0x1c,%esp
                 83 ec 1c
 804a261:
                                            sub
                 8b 6c 24 30
                                                    0x30(%esp),%ebp
 804a264:
                                            mov
                 8d b3 0c ff ff ff
 804a268:
                                                    -0xf4(%ebx),%esi
                                             lea
 804a26e:
                 e8 4d e5 ff ff
                                            call
                                                    80487c0 <_init>
                 8d 83 08 ff ff ff
 804a273:
                                                    -0xf8(%ebx),%eax
                                            lea
 804a279:
                 29 c6
                                            sub
                                                    %eax,%esi
 804a27b:
                 c1 fe 02
                                                    $0x2,%esi
                                             sar
                 85 f6
                                                    %esi,%esi
 804a27e:
                                             test
                 74 27
                                                    804a2a9 <__libc_csu_init+0x59> 0x0(%esi),%esi
 804a280:
                                             jе
                 8d b6 00 00 00 00
 804a282:
                                             lea
 804a288:
                 8b 44 24 38
                                                    0x38(%esp), %eax
                                            mov
                 89 2c 24
89 44 24 08
 804a28c:
                                                    %ebp,(%esp)
                                            mov
 804a28f:
                                                    %eax,0x8(%esp)
                                            mov
                 8b 44 24 34
 804a293:
                                            mov
                                                    0x34(%esp),%eax
 804a297:
                 89 44 24 04
                                            mov
                                                    %eax,0x4(%esp)
                 ff 94 bb 08 ff ff ff
                                                    *-0xf8(%ebx,%edi,4)
 804a29b:
                                            call
 804a2a2:
                 83 c7 01
                                            add
                                                    $0x1,%edi
                 39 f7
 804a2a5:
                                             cmp
                                                    %esi,%edi
                                                    .
804a288 <__libc_csu_init+0x38>
                 75 df
 804a2a7:
                                             ine
                 83 c4 1c
                                                    $0x1c,%esp
 804a2a9:
                                             add
 804a2ac:
                 5b
                                             pop
                                                    %ebx
 804a2ad:
                 5e
                                                    %esi
                                             pop
 804a2ae:
                 5f
                                                    %edi
                                             gog
 804a2af:
                 5d
                                                    %ebp
                                             pop
 804a2b0:
                  c3
                                             ret
 804a2b1:
                  eb 0d
                                             jmp
                                                    804a2c0 <__libc_csu_fini>
 804a2b3:
                 90
                                             nop
                 90
 804a2b4:
                                            nop
 804a2b5:
                 90
                                             nop
 804a2b6:
                 90
                                             nop
                 90
                                             nop
 804a2b7:
 804a2b8:
                 90
                                            nop
 804a2b9:
                 90
                                             nop
 804a2ba:
                 90
                                             nop
                 90
 804a2bb:
                                            nop
                 90
 804a2bc:
                                             nop
 804a2bd:
                 90
                                             nop
 804a2be:
                                            gon
                 90
 804a2bf:
                                            nop
0804a2c0 <__libc_csu_fini>:
 804a2c0:
                 f3 c3
                                             repz ret
Disassembly of section .fini:
0804a2c4 <_fini>:
 804a2c4:
                 53
                                                    %ebx
                                            push
 804a2c5:
                 83 ec 08
                                             sub
                                                    $0x8,%esp
 804a2c8:
                 e8 c3 e7 ff ff
                                                    8048a90 <__x86.get_pc_thunk.bx>
                                             call
 804a2cd:
                 81 c3 2b 0e 00 00
                                                    $0xe2b,%ebx
                                            add
 804a2d3:
                 83 c4 08
                                                    $0x8,%esp
                                            add
 804a2d6:
                 5b
                                             pop
                                                    %ebx
 804a2d7:
                 c3
                                             ret
Disassembly of section .rodata:
0804a2d8 <_fp_hw>:
 804a2d8:
                03 00
                                            add
                                                    (%eax),%eax
0804a2dc <_IO_stdin_used>:
 804a2dc:
                                            add
                                                    %eax,(%eax)
                 01 00
 804a2de:
                 02 00
                                             add
                                                    (%eax),%al
 804a2e0:
                 53
                                             push
                                                    %ebx
```

```
804a2e1:
                 6d
                                                     (%dx),%es:(%edi)
                                             insl
804a2e2:
                 6f
                                             outsl
                                                     %ds:(%esi),(%dx)
                 6b 65 21 3a
804a2e3:
                                             imul
                                                     $0x3a,0x21(%ebp),%esp
804a2e7:
                 20 59 6f
                                                     %bl,0x6f(%ecx)
                                             and
804a2ea:
                 75 20
                                                     804a30c <_I0_stdin_used+0x30>
                                             ine
                                                     %sp,0x6c(%ecx)
804a2ec:
                 63 61 6c
                                             arpl
804a2ef:
                 6c
                                             insb
                                                     (%dx),%es:(%edi)
804a2f0:
                 65 64 20 73 6d
                                             gs and %dh,%fs:0x6d(%ebx)
804a2f5:
                 6f
                                             outsl
                                                     %ds:(%esi),(%dx)
                 6b 65 28 29
00 46 69
804a2f6:
                                             imul
                                                     $0x29,0x28(%ebp),%esp
804a2fa:
                                             add
                                                     %al,0x69(%esi)
                                                     .
804a379 <_I0_stdin_used+0x9d>
804a2fd:
                 7a 7a
                                             jр
804a2ff:
                 21 3a
                                             and
                                                     %edi,(%edx)
                 20 59 6f
804a301:
                                             and
                                                     %bl,0x6f(%ecx)
804a304:
                 75 20
                                                     804a326 <_I0_stdin_used+0x4a>
                                             jne
804a306:
                 63 61 6c
                                             arpl
                                                     %sp,0x6c(%ecx)
804a309:
                                             insb
                                                     (%dx),%es:(%edi)
                 6c
                 65 64 20 66 69
804a30a:
                                             gs and %ah,%fs:0x69(%esi)
804a30f:
                 7a 7a
                                                     804a38b <_IO_stdin_used+0xaf>
                                             qį
                 28 30
                                                     %dh,(%eax)
804a311:
                                             sub
                                                     804a33a <_I0_stdin_used+0x5e>
804a340 <_I0_stdin_used+0x64>
                 78 25
804a313:
                                             js
                 78 29
804a315:
                                             js
804a317:
                 0a 00
                                                     (%eax),%al
                                             or
804a319:
                 00 00
                                                     %al,(%eax)
                                             add
804a31b:
                 00 4d 69
                                                     %cl,0x69(%ebp)
                                             add
804a31e:
                 73 66
                                                     804a386 <_IO_stdin_used+0xaa>
                                             jae
804a320:
                 69 72 65 3a 20 59 6f
                                             imul
                                                     $0x6f59203a,0x65(%edx),%esi
                                                     804a349 <_IO_stdin_used+0x6d>
                 75 20
804a327:
                                             jne
804a329:
                 63 61 6c
                                             arpl
                                                     %sp,0x6c(%ecx)
804a32c:
                                                     (%dx),%es:(%edi)
                 6c
                                             insb
                                             gs and %ah,%fs:0x69(%esi)
                 65 64 20 66 69
804a32d:
                 7a 7a
                                                     804a3ae <_I0_stdin_used+0xd2>
804a332:
                                             jр
804a334:
                 28 30
                                             sub
                                                     %dh,(%eax)
804a336:
                 78 25
                                                     804a35d <_I0_stdin_used+0x81>
                                             js
                                                     804a363 <_IO_stdin_used+0x87>
804a338:
                 78 29
                                             is
804a33a:
                 0a 00
                                             ٥r
                                                     (%eax),%al
804a33c:
                 42
                                             inc
                                                     %edx
804a33d:
                 61
                                             popa
804a33e:
                 6e
                                             outsb
                                                     %ds:(%esi),(%dx)
                 67 21 3a
                                                     %edi,(%bp,%si)
804a33f:
                                             and
804a342:
                 20
                    59 6f
                                             and
                                                     %bl,0x6f(%ecx)
804a345:
                 75 20
                                             jne
                                                     804a367 <_I0_stdin_used+0x8b>
                                                     804a3ae <_IO_stdin_used+0xd2>
804a36b <_IO_stdin_used+0x8f>
804a347:
                 73 65
                                             jae
804a349:
                 74 20
                                             jе
804a34b:
                 67 6c
                                             insb
                                                     (%dx),%es:(%di)
804a34d:
                 6f
                                                     %ds:(%esi),(%dx)
                                             outsl
804a34e:
                 62 61 6c
                                             bound
                                                     %esp,0x6c(%ecx)
804a351:
                                                     %edi
                 5f
                                             pop
804a352:
                 76 61
                                             jbe
                                                     804a3b5 <_I0_stdin_used+0xd9>
804a354:
                 6c
                                             insb
                                                     (%dx),%es:(%edi)
                                                     804a3bc <_IO_stdin_used+0xe0>
%dh,0x20(%edi,%ebp,2)
804a355:
                 75 65
                                             jne
                    74 6f 20
804a357:
                 20
                                             and
804a35b:
                 30 78 25
                                                     %bh,0x25(%eax)
                                             xor
804a35e:
                 78 0a
                                                     804a36a <_I0_stdin_used+0x8e>
                                             is
804a360:
                 00 4d 69
                                                     %cl,0x69(%ebp)
                                             add
804a363:
                 73 66
                                             jae
                                                     804a3cb <_I0_stdin_used+0xef>
804a365:
                 69
                    72 65 3a 20 67 6c
                                                     $0x6c67203a,0x65(%edx),%esi
                                             imul
804a36c:
                 6f
                                             outsl
                                                     %ds:(%esi),(%dx)
                 62 61 6c
804a36d:
                                             bound
                                                     %esp,0x6c(%ecx)
804a370:
                 5f
                                                     %edi
                                             pop
804a371:
                 76 61
                                                     804a3d4 <_IO_stdin_used+0xf8>
                                             jbe
                                                     (%dx),%es:(%edi)
804a3db <_IO_stdin_used+0xff>
804a373:
                 6c
                                             insb
804a374:
                 75
                    65
                                             jne
                 20 3d 20 30 78 25
804a376:
                                             and
                                                     %bh,0x25783020
                 78 0a
804a37c:
                                             is
                                                     804a388 <_I0_stdin_used+0xac>
                 00 00
                                                     %al,(%eax)
804a37e:
                                             add
804a380:
                 53
                                             push
                                                     %ebx
804a381:
                 61
                                             popa
804a382:
                 62 6f 74
                                             bound
                                                     %ebp,0x74(%edi)
                 61
804a385:
                                             popa
                 67 65 64 21 3a
804a386:
                                             gs and %edi,%fs:(%bp,%si)
804a38b:
                 20 74 68 65
                                             and
                                                     %dh,0x65(%eax,%ebp,2)
                 20 73 74
804a38f:
                                             and
                                                     %dh,0x74(%ebx)
804a392:
                 61
                                             popa
804a393:
                 63 6b 20
                                             arpl
                                                     %bp,0x20(%ebx)
804a396:
                 68 61 73 20 62
                                                     $0x62207361
                                             push
```

```
804a39b:
                 65 65 6e
                                              gs outsb %gs:(%esi),(%dx)
804a39e:
                  20 63 6f
                                              and
                                                      %ah,0x6f(%ebx)
804a3a1:
                  72 72
                                              jb
                                                      804a415 <_I0_stdin_used+0x139>
804a3a3:
                  75 70
                                                      804a415 <_IO_stdin_used+0x139>
                                              jne
                                                      804a40c <_I0_stdin_used+0x130>
804a3a5:
                  74 65
                                              jе
                  64 00 42 6f
804a3a7:
                                              add
                                                      %al.%fs:0x6f(%edx)
804a3ab:
                  6f
                                              outsl
                                                      %ds:(%esi),(%dx)
804a3ac:
                                                      (%dx),%es:(%edi)
                 6d
                                              insl
                                                      %edi,(%edx)
804a3ad:
                  21 3a
                                              and
                  20 67 65
804a3af:
                                              and
                                                      %ah,0x65(%edi)
804a3b2:
                  74 62
                                              jе
                                                      804a416 <_IO_stdin_used+0x13a>
                  75 66
                                                      804a41c < IO stdin used+0x140>
804a3b4:
                                              jne
                  20 72 65
                                                      %dh,0x65(%edx)
804a3b6:
                                              and
                  74 75
                                                      804a430 < I0_stdin_used+0x154>
804a3b9:
                                              jе
804a3bb:
                  72 6e
                                                      804a42b <_I0_stdin_used+0x14f>
                                              ib
804a3bd:
                  65 64 20 30
                                              gs and %dh,%fs:(%eax)
                                                      804a3e8 <_IO_stdin_used+0x10c>
804a3cf <_IO_stdin_used+0xf3>
804a3c1:
                 78 25
                                              js
804a3c3:
                  78 0a
                                              js
804a3c5:
                  00 44 75 64
                                                      %al,0x64(%ebp,%esi,2)
                                              add
804a3c9:
                 3a 20
                                              cmp
                                                      (%eax),%ah
                 67 65 74 62
                                              addr16 gs je 804a431 <_I0_stdin_used+0x155>
804a3cb:
                 75 66
804a3cf:
                                              jne
                                                      804a437 <_I0_stdin_used+0x15b>
804a3d1:
                  20 72 65
                                                      %dh,0x65(%edx)
                                              and
                                                      804a44b <_IO_stdin_used+0x16f>
804a446 <_IO_stdin_used+0x16a>
804a3d4:
                  74 75
                                              iе
804a3d6:
                  72 6e
                                              jЬ
                  65 64 20 30
804a3d8:
                                              gs and %dh,%fs:(%eax)
804a3dc:
                  78
                    25
                                              js
                                                      804a403 <_IO_stdin_used+0x127>
                                                      804a3ea <_IO_stdin_used+0x10e>
                 78 0a
804a3de:
                                              js
                                                      %al,(%eax)
804a3e0:
                  00 00
                                              add
804a3e2:
                 00 00
                                                      %al,(%eax)
                                              add
804a3e4:
                  4b
                                              dec
                                                      %ebx
                  41
804a3e5:
                                                      %ecx
                                              inc
804a3e6:
                  42
                                              inc
                                                      %edx
804a3e7:
                  4f
                                                      %edi
                                              dec
                  4f
804a3e8:
                                              dec
                                                      %edi
                  4d
                                                      %ebp
804a3e9:
                                              dec
804a3ea:
                  21 3a
                                              and
                                                      %edi,(%edx)
804a3ec:
                  20
                    67 65
                                              and
                                                      %ah,0x65(%edi)
804a3ef:
                  74 62
                                                      804a453 <_I0_stdin_used+0x177>
                                              ie
                                                      804a459 <_IO_stdin_used+0x17d>
                 75 66
804a3f1:
                                              jne
804a3f3:
                 6e
                                              outsb
                                                      %ds:(%esi),(%dx)
804a3f4:
                 20 72 65
                                              and
                                                      %dh,0x65(%edx)
                                                      804a46e <_IO_stdin_used+0x192>
804a469 <_IO_stdin_used+0x18d>
804a3f7:
                  74 75
                                              jе
                 72 6e
804a3f9:
                                              jЬ
                  65 64 20 30
804a3fb:
                                              gs and %dh,%fs:(%eax)
804a3ff:
                  78 25
                                                      804a426 < IO stdin used+0x14a>
                                              js
                                                      804a40d <_IO_stdin_used+0x131>
804a401:
                 78 Øa
                                              js
                                                      %al,0x64(%ebp,%esi,2)
804a403:
                  00 44 75 64
                                              \operatorname{\mathsf{add}}
804a407:
                  3a
                    20
                                              cmp
                                                      (%eax),%ah
                  67 65 74 62
                                              addr16 gs je 804a46f < IO stdin used+0x193>
804a409:
804a40d:
                 75 66
                                                      804a475 <_I0_stdin_used+0x199>
                                              jne
804a40f:
                                                      %ds:(%esi),(%dx)
                 6e
                                              outsb
804a410:
                  20 72 65
                                                      %dh,0x65(%edx)
                                              and
                                                      804a48a <_IO_stdin_used+0x1ae>
804a485 <_IO_stdin_used+0x1a9>
804a413:
                  74 75
                                              ie
                 72 6e
804a415:
                                              jb
804a417:
                  65 64 20 30
                                              gs and %dh,%fs:(%eax)
804a41b:
                  78 25
                                                      804a442 <_I0_stdin_used+0x166>
                                              js
                                                      804a429 < IO stdin used+0x14d>
804a41d:
                  78 Øa
                                              is
                  00 55 73
                                                      %dl,0x73(%ebp)
804a41f:
                                              add
804a422:
                  61
                                              popa
804a423:
                  67 65 3a 20
                                              cmp
                                                      %gs:(%bx,%si),%ah
                    73 20 2d 75
3c 75 73 65 72 69
                                                      $0x752d2073,%eax
804a427:
                  25
                                              and
804a42c:
                  20
                                                      %bh,0x69726573(,%esi,2)
                                              and
804a433:
                  64 3e 20 5b 2d
                                              fs and %bl,%ds:0x2d(%ebx)
                                                      %ds:(%esi),(%dx)
804a438:
                  6e
                                              outsb
804a439:
                 73 68
                                                      804a4a3 <_IO_stdin_used+0x1c7>
                                              jae
804a43b:
                  5d
                                              pop
                                                      %ebp
804a43c:
                  0a 00
                                                      (%eax),%al
                                              or
804a43e:
                 20 20
                                              and
                                                      %ah,(%eax)
804a440:
                  2d 75 20 3c 75
                                                      $0x753c2075,%eax
                                              sub
                                                      804a4ac <_IO_stdin_used+0x1d0>
804a445:
                  73 65
                                              jae
804a447:
                 72 69
                                              jЬ
                                                      804a4b2 <_I0_stdin_used+0x1d6>
804a449:
                 64 3e 20 55 73
                                              fs and %dl,%ds:0x73(%ebp)
                                                      804a471 <_IO_stdin_used+0x195>
804a44e:
                 65 72 20
                                              gs jb
804a451:
                  49
                                              dec
                                                      %ecx
804a452:
                  44
                                              inc
                                                      %esp
```

```
00 20
804a453:
                                             add
                                                     %ah, (%eax)
                 20 2d 6e 20 20 20
                                                     %ch,0x2020206e
804a455:
                                             and
804a45b:
                 20 20
                                             and
                                                     %ah, (%eax)
804a45d:
                 20 20
                                                     %ah, (%eax)
                                             and
                                                     %ah,(%eax)
804a45f:
                 20 20
                                             and
                 20 4e 69
804a461:
                                             and
                                                     %cl,0x69(%esi)
804a464:
                 74 72
                                             jе
                                                     804a4d8 <_I0_stdin_used+0x1fc>
804a466:
                 6f
                                                     %ds:(%esi),(%dx)
                                             outsl
                                                     %ch,0x6f(%ebp)
804a467:
                 20 6d 6f
                                             and
804a46a:
                 64 65 00 00
                                             fs add %al,%gs:(%eax)
804a46e:
                 00 00
                                             add
                                                     %al,(%eax)
804a470:
                 20 20
                                             and
                                                     %ah, (%eax)
                                                     $0x20202073,%eax
                 2d 73 20 20 20
804a472:
                                             sub
804a477:
                 20 20
                                             and
                                                     %ah, (%eax)
804a479:
                 20 20
                                                     %ah, (%eax)
                                             and
                                                     %ah,(%eax)
804a47b:
                 20 20
                                             and
804a47d:
                 20 53 75
                                                     %dl,0x75(%ebx)
                                             and
804a480:
                 62 6d 69
                                             bound
                                                     %ebp,0x69(%ebp)
804a483:
                 74 20
                                                     804a4a5 <_I0_stdin_used+0x1c9>
                                             jе
                                                     804a4f6 <_IO_stdin_used+0x21a>
804a4fb <_IO_stdin_used+0x21f>
                 79 6f
804a485:
                                             ins
                 75 72
804a487:
                                             jne
                 20 73 6f
                                                     %dh,0x6f(%ebx)
804a489:
                                             and
804a48c:
                 6c
                                                     (%dx),%es:(%edi)
                                             insb
                                                     804a503 <_I0_stdin_used+0x227>
804a48d:
                 75 74
                                             ine
                                                     $0x206f7420,0x6e(%edi),%ebp
804a48f:
                 69 6f 6e 20 74 6f 20
                                             imul
804a496:
                 74 68
                                                     804a500 <_I0_stdin_used+0x224>
                                             jе
804a498:
                 65 20 67 72
                                             and
                                                     %ah,%gs:0x72(%edi)
804a49c:
                 61
                                             popa
                 64 69 6e 67 20 73 65
804a49d:
                                             imul
                                                     $0x72657320,%fs:0x67(%esi),%ebp
804a4a4:
                 72
804a4a5:
                 76 65
                                             jbe
                                                     804a50c <_I0_stdin_used+0x230>
                 72 00
                                             jЬ
                                                     804a4a9 <_IO_stdin_used+0x1cd>
804a4a7:
                 00 00
804a4a9:
                                             add
                                                     %al,(%eax)
804a4ab:
                 00 20
                                                     %ah, (%eax)
                                             add
                 20 2d 68 20 20 20
804a4ad:
                                                     %ch,0x20202068
                                             and
804a4b3:
                 20 20
                                                     %ah,(%eax)
                                             and
804a4b5:
                 20 20
                                             and
                                                     %ah,(%eax)
804a4b7:
                 20
                    20
                                             and
                                                     %ah, (%eax)
                 20 50 72
804a4b9:
                                                     %dl,0x72(%eax)
                                             and
804a4bc:
                 69 6e 74 20 68 65 6c
                                                     $0x6c656820,0x74(%esi),%ebp
                                             imul
804a4c3:
                 70 20
                                             jο
                                                     804a4e5 <_I0_stdin_used+0x209>
804a4c5:
                 69 6e 66 6f 72 6d 61
                                             imul
                                                     $0x616d726f,0x66(%esi),%ebp
804a4cc:
                 74 69
                                                     804a537 <_I0_stdin_used+0x25b>
                                             iе
804a4ce:
                 6f
                                             outsl
                                                     %ds:(%esi),(%dx)
804a4cf:
                 6e
                                             outsb
                                                     %ds:(%esi),(%dx)
                 00 00
                                                     %al,(%eax)
804a4d0:
                                             add
                                                     %al,(%eax)
804a4d2:
                 00 00
                                             add
804a4d4:
                 43
                                             inc
                                                     %ebx
                                             jЬ
804a4d5:
                 72 61
                                                     804a538 <_I0_stdin_used+0x25c>
                 73 68
                                                     804a541 <_IO_stdin_used+0x265>
804a4d7:
                                             jae
804a4d9:
                 21 3a
                                                     %edi,(%edx)
                                             and
804a4db:
                 20 59 6f
                                             and
                                                     %bl,0x6f(%ecx)
804a4de:
                 75 20
                                                     804a500 <_IO_stdin_used+0x224>
                                             jne
804a4e0:
                 63 61 75
                                             arpl
                                                     %sp,0x75(%ecx)
                 73 65
                                                     804a54a <_I0_stdin_used+0x26e>
804a4e3:
                                             jae
                 64 20 61 20
62 75 73
                                                     %ah,%fs:0x20(%ecx)
804a4e5:
                                             and
804a4e9:
                                                     %esi,0x73(%ebp)
                                             bound
                 20 65 72
804a4ec:
                                                     %ah,0x72(%ebp)
                                             and
                 72 6f
804a4ef:
                                                     804a560 <_I0_stdin_used+0x284>
                                             jb
804a4f1:
                 72
                    21
                                             jb
                                                     804a514 <_I0_stdin_used+0x238>
804a4f3:
                 00 42 65
                                                     %al,0x65(%edx)
                                             add
                                                    804a56c <_IO_stdin_used+0x290>
804a51b <_IO_stdin_used+0x23f>
804a4f6:
                 74 74
                                             jе
804a4f8:
                 65 72 20
                                             gs jb
804a4fb:
                 6c
                                             insb
                                                     (%dx),%es:(%edi)
                                                     804a561 <_IO_stdin_used+0x285>
$0x6e,(%eax),%esp
                 75 63
804a4fc:
                                             ine
804a4fe:
                 6b 20 6e
                                             imul
                                                     804a578 <_I0_stdin_used+0x29c>
804a501:
                 65 78 74
                                             gs js
804a504:
                 20
                    74 69 6d
                                             and
                                                     %dh,0x6d(%ecx,%ebp,2)
                                                     %al,%gs:(%eax)
                 65 00 00
804a508:
                                             add
                 00 4f 75
                                                     %cl,0x75(%edi)
804a50b:
                                             add
                 63 68 21
804a50e:
                                             arpl
                                                     %bp,0x21(%eax)
804a511:
                 3a 20
                                             cmp
                                                     (%eax),%ah
                 59
804a513:
                                             gog
                                                     %ecx
804a514:
                 6f
                                                     %ds:(%esi),(%dx)
                                             outsl
804a515:
                 75 20
                                             jne
                                                     804a537 <_I0_stdin_used+0x25b>
                 63 61 75
                                                     %sp,0x75(%ecx)
804a517:
                                             arpl
```

```
804a581 <_I0_stdin_used+0x2a5>
804a51a:
                 73 65
                                             iae
804a51c:
                 64 20 61 20
                                             and
                                                     %ah,%fs:0x20(%ecx)
804a520:
                 73 65
                                             jae
                                                     804a587 <_I0_stdin_used+0x2ab>
804a522:
                 67 6d
                                                     (%dx),%es:(%di)
                                             insl
804a524:
                 65 6e
                                             outsb
                                                     %gs:(%esi),(%dx)
                 74 61
804a526:
                                             jе
                                                     804a589 < I0_stdin_used+0x2ad>
                 74 69
                                                     804a593 <_IO_stdin_used+0x2b7>
804a528:
                                             jе
                 6f
                                                     %ds:(%esi),(%dx)
804a52a:
                                             outsl
                                                     %ds:(%esi),(%dx)
804a52b:
                 6e
                                             outsb
                 20 66 61
804a52c:
                                             and
                                                     %ah,0x61(%esi)
                                                     804a59d <_IO_stdin_used+0x2c1>
804a554 <_IO_stdin_used+0x278>
804a52f:
                 75 6c
                                             jne
                 74 21
804a531:
                                             ie
                 00 4f 6f
                                                     %cl,0x6f(%edi)
804a533:
                                             add
                 70 73
804a536:
                                             jο
                                                     804a5ab <_I0_stdin_used+0x2cf>
804a538:
                 21 3a
                                             and
                                                     %edi,(%edx)
804a53a:
                 20 59 6f
                                             and
                                                     %bl,0x6f(%ecx)
                                                     804a55f <_IO_stdin_used+0x283>
804a5a7 <_IO_stdin_used+0x2cb>
                 75 20
804a53d:
                                             jne
                 65 78 65
804a53f:
                                             gs js
804a542:
                 63
                    75 74
                                                     %si,0x74(%ebp)
                                             arpl
                 65 64 20 61 6e
804a545:
                                             gs and %ah,%fs:0x6e(%ecx)
                 20 69 6c
                                                     %ch,0x6c(%ecx)
804a54a:
                                             and
804a54d:
                 6c
                                             insb
                                                     (%dx),%es:(%edi)
804a54e:
                 65 67 61
                                             gs addr16 popa
804a551:
                                                     (%dx),%es:(%edi)
                 6c
                                             insb
                 20 69 6e
                                                     %ch,0x6e(%ecx)
804a552:
                                             and
                                                     804a5cb <_IO_stdin_used+0x2ef>
804a5ce <_IO_stdin_used+0x2f2>
804a555:
                 73 74
                                             jae
804a557:
                 72 75
                                             jb
                                                     %si,0x6f(%ecx,%ebp,2)
                 63 74 69 6f
804a559:
                                             arpl
804a55d:
                 6e
                                             outsb
                                                     %ds:(%esi),(%dx)
804a55e:
                 00 54 79 70
                                                     %dl,0x70(%ecx,%edi,2)
                                             add
                 65 20 73 74
804a562:
                                             and
                                                     %dh,%qs:0x74(%ebx)
                 72 69
                                                     804a5d1 < I0_stdin_used+0x2f5>
804a566:
                                             jb
                                                     %ds:(%esi),(%dx)
804a568:
                 6e
                                             outsb
804a569:
                 67 3a 00
                                                     (%bx,%si),%al
                                             cmp
804a56c:
                 49
                                             dec
                                                     %ecx
                                                     %ds:(%esi),(%dx)
                                             outsb
804a56d:
                 6e
804a56e:
                 74 65
                                             jе
                                                     804a5d5 < I0_stdin_used+0x2f9>
804a570:
                 72 6e
                                             jb
                                                     804a5e0 <_I0_stdin_used+0x304>
804a572:
                 61
                                             popa
804a573:
                 6c
                                             insb
                                                     (%dx),%es:(%edi)
                 20 65 72
804a574:
                                             and
                                                     %ah,0x72(%ebp)
804a577:
                 72 6f
                                             jb
                                                     804a5e8 <_I0_stdin_used+0x30c>
                                             jb
                 72 2e
                                                     804a5a9 <_IO_stdin_used+0x2cd>
804a579:
804a57b:
                 20 20
                                             and
                                                     %ah,(%eax)
804a57d:
                 43
                                                     %ebx
                                             inc
                                                     %ds:(%esi),(%dx)
804a57e:
                 6f
                                             outsl
804a57f:
                 75 6c
                                                     804a5ed <_IO_stdin_used+0x311>
                                             jne
                                                     %fs:(%esi),(%dx)
804a581:
                 64 6e
                                             outsb
804a583:
                 27
                                             daa
                 74 20
804a584:
                                                     804a5a6 <_I0_stdin_used+0x2ca>
                                             ie
804a586:
                 75
                                                     804a5fb <_I0_stdin_used+0x31f>
                    73
                                             jne
                 65 20 6d 6d
804a588:
                                             and
                                                     %ch,%gs:0x6d(%ebp)
804a58c:
                 61
                                             popa
804a58d:
                 70 2e
                                             jo
                                                     804a5bd <_I0_stdin_used+0x2e1>
                                                     %dl,0x79(%edx,%esi,2)
                 20 54 72 79
                                             and
804a58f:
804a593:
                 20 64 69 66
                                             and
                                                     %ah,0x66(%ecx,%ebp,2)
                                             data16 gs jb 804a600 <_I0_stdin_used+0x324>
804a597:
                 66 65 72 65
804a59b:
                                                     %ds:(%esi),(%dx)
                 6e
                                             outsb
                 74 20
                                                     804a5be <_IO_stdin_used+0x2e2>
804a59c:
                                             jе
804a59e:
                 76 61
                                             jbe
                                                     804a601 <_IO_stdin_used+0x325>
804a5a0:
                 6c
                                             insb
                                                     (%dx),%es:(%edi)
                 75 65
                                                     804a608 <_I0_stdin_used+0x32c>
804a5a1:
                                             ine
804a5a3:
                    66 6f
                                                     %ah,0x6f(%esi)
                 20
                                             and
804a5a6:
                 72 20
                                             jb
                                                     804a5c8 <_I0_stdin_used+0x2ec>
804a5a8:
                 53
                                             push
                                                     %ebx
                 54
804a5a9:
                                                     %esp
                                             push
                 41
804a5aa:
                                             inc
                                                     %ecx
804a5ab:
                 52
                                             push
                                                     %edx
804a5ac:
                 54
                                             push
                                                     %esp
                 5f
804a5ad:
                                             pop
                                                     %edi
                 41
804a5ae:
                                             inc
                                                     %ecx
804a5af:
                 44
                                             inc
                                                     %esp
804a5b0:
                 44
                                             inc
                                                     %esp
804a5b1:
                 52
                                             push
                                                     %edx
804a5b2:
                 0a 00
                                                     (%eax),%al
                                             or
804a5b4:
                 67 73 6e
                                             addr16 jae 804a625 <_I0_stdin_used+0x349>
```

```
804a5b7:
                 68 75 3a 00 00
                                                   $0x3a75
                                           push
                                                   $0x4d203a73,%eax
804a5bc:
                 25 73 3a 20 4d
                                            and
                 69 73 73 69 6e 67 20
                                                   $0x20676e69,0x73(%ebx),%esi
804a5c1:
                                            imul
804a5c8:
                 72 65
                                                   804a62f <_IO_stdin_used+0x353>
                                            jb
                                            jno
                                                   804a641 <_I0_stdin_used+0x365>
804a5ca:
                 71 75
                 69 72 65 64 20 61 72
                                                   $0x72612064,0x65(%edx),%esi
                                            imul
804a5cc:
                 67 75 6d
                                            addr16 jne 804a643 <_I0_stdin_used+0x367>
804a5d3:
804a5d6:
                 65 6e
                                                   %gs:(%esi),(%dx)
                                            outsb
                                                   804a5fa <_IO_stdin_used+0x31e>
804a5d8:
                 74 20
                                           jе
                 28 2d 75 20 3c 75
                                                   %ch,0x753c2075
804a5da:
                                            sub
804a5e0:
                 73 65
                                            jae
                                                   804a647 <_I0_stdin_used+0x36b>
                                                   804a64d <_IO_stdin_used+0x371>
804a5e2:
                 72 69
                                            jb
                 64 29 0a
                                                   %ecx,%fs:(%edx)
804a5e4:
                                            sub
                 00
                   55 73
804a5e7:
                                           add
                                                   %dl,0x73(%ebp)
804a5ea:
                 65
                   72 69
                                                   804a656 <_I0_stdin_used+0x37a>
                                            gs jb
804a5ed:
                 64 3a 20
                                                   %fs:(%eax),%ah
                                            cmp
804a5f0:
                25
                   73 0a 00 43
                                                   $0x43000a73,%eax
                                           and
804a5f5:
                 6f
                                            outsl
                                                   %ds:(%esi),(%dx)
804a5f6:
                                                   %ds:(%esi),(%dx)
                 6f
                                            outsl
                                                   $0x3a,0x65(%ecx),%ebp
804a5f7:
                 6b 69 65 3a
                                            imul
804a5fb:
                 20 30
                                           and
                                                   %dh,(%eax)
                78 25
804a5fd:
                                            js
                                                   804a624 <_I0_stdin_used+0x348>
804a5ff:
                 78 0a
                                                   804a60b <_IO_stdin_used+0x32f>
                                            js
804a601:
                 00 00
                                                   %al,(%eax)
                                           add
                00 b8 91 04 08 5b
804a603:
                                                   %bh,0x5b080491(%eax)
                                           add
                                            xchg
804a609:
                 91
                                                   %eax,%ecx
804a60a:
                 04 08
                                            add
                                                   $0x8,%al
                 c4 91 04 08 c4 91
804a60c:
                                                   -0x6e3bf7fc(%ecx),%edx
                                            les
804a612:
                04 08
                                            add
                                                   $0x8,%al
804a614:
                 c4 91 04 08 c4 91
                                                   -0x6e3bf7fc(%ecx),%edx
                                            les
804a61a:
                 04 08
                                            add
                                                   $0x8,%al
                 c4 91 04 08 6e 91
                                                   -0x6e91f7fc(%ecx),%edx
804a61c:
                                            les
                 04 08
804a622:
                                            add
                                                   $0x8,%al
804a624:
                 c4 91 04 08 c4 91
                                                   -0x6e3bf7fc(%ecx),%edx
                                            les
804a62a:
                 04 08
                                            add
                                                   $0x8,%al
804a62c:
                 c4 91 04 08 c4 91
                                                   -0x6e3bf7fc(%ecx),%edx
                                            les
804a632:
                 04 08
                                            add
                                                   $0x8,%al
804a634:
                 ac
                                            lods
                                                   %ds:(%esi),%al
804a635:
                91
                                           xchq
                                                   %eax,%ecx
804a636:
                 04 08
                                            add
                                                   $0x8,%al
804a638:
                 c4 91 04 08 7e 91
                                            les
                                                   -0x6e81f7fc(%ecx),%edx
804a63e:
                 04 08
                                            add
                                                   $0x8,%al
804a640:
                 69 6e 69 74 69 61 6c
                                                   $0x6c616974,0x69(%esi),%ebp
                                            imul
                   7a 65 5f 62 6f 6d
                                                   $0x6d6f625f,0x65(%edx),%edi
                                            imul
804a647:
                69
804a64e:
                 62 3a
                                            bound
                                                   %edi,(%edx)
804a650:
                 20 43 6f
                                            and
                                                   %al,0x6f(%ebx)
                                                   .
804a6c1 <_I0_stdin_used+0x3e5>
804a653:
                 75 6c
                                            ine
                64 20 6e 6f
                                                   %ch,%fs:0x6f(%esi)
804a655:
                                            and
804a659:
                 74
                   20
                                            jе
                                                   804a67b <_I0_stdin_used+0x39f>
                 67 65 74 20
                                           addr16 gs je 804a67f <_IO_stdin_used+0x3a3>
804a65b:
804a65f:
                 68 6f 73 74 6e
                                                   $0x6e74736f
                                            push
804a664:
                61
                                            popa
804a665:
                 6d
                                            insl
                                                   (%dx),%es:(%edi)
804a666:
                 65 20 6f 66
                                            and
                                                   %ch,%gs:0x66(%edi)
                   74 68 69
804a66a:
                 20
                                                   %dh,0x69(%eax,%ebp,2)
                                           and
804a66e:
                 73 20
                                           jae
                                                   804a690 <_I0_stdin_used+0x3b4>
804a670:
                 6d
                                                   (%dx),%es:(%edi)
                                            insl
804a671:
                61
                                           popa
                 63 68 69
804a672:
                                                   %bp,0x69(%eax)
                                            arpl
804a675:
                                            outsb
                                                   %ds:(%esi),(%dx)
                 6e
804a676:
                 65 00 69 6e
                                           add
                                                   %ch,%gs:0x6e(%ecx)
                 69 74 69 61 6c 69 7a
804a67a:
                                            imul
                                                   $0x657a696c,0x61(%ecx,%ebp,2),%esi
804a681:
                65
804a682:
                 5f
                                                   %edi
                                            pop
                 62 6f 6d
804a683:
                                            bound
                                                   %ebp,0x6d(%edi)
804a686:
                 62 3a
                                                   %edi,(%edx)
                                            bound
804a688:
                 20 45 72
                                            and
                                                   %al,0x72(%ebp)
804a68b:
                 72 6f
                                                   804a6fc <_I0_stdin_used+0x420>
                                            jЬ
                                                   804a6c9 <_IO_stdin_used+0x3ed>
804a68d:
                 72 3a
                                            jb
804a68f:
                 20 25 73 20 69 73
                                                   %ah,0x73692073
                                            and
804a695:
                 20 6e 6f
                                           and
                                                   %ch,0x6f(%esi)
804a698:
                 74 20
                                           jе
                                                   804a6ba <_I0_stdin_used+0x3de>
804a69a:
                6f
                                           outsl
                                                   %ds:(%esi),(%dx)
804a69b:
                                           outsb
                                                   %ds:(%esi),(%dx)
                6e
                 65 20 6f 66
804a69c:
                                            and
                                                   %ch,%gs:0x66(%edi)
                   74 68 65
804a6a0:
                 20
                                           and
                                                   %dh,0x65(%eax,%ebp,2)
```

```
804a6a4:
                 20 6c 65 67
                                            and
                                                    %ch,0x67(%ebp,%eiz,2)
804a6a8:
                 61
                                            popa
804a6a9:
                 6c
                                            insb
                                                    (%dx),%es:(%edi)
804a6aa:
                 20 68 6f
                                                    %ch, 0x6f(%eax)
                                            and
                 73 74
                                                    804a723 <_IO_stdin_used+0x447>
804a6eb <_IO_stdin_used+0x40f>
804a6ad:
                                            iae
804a6af:
                 73
                    3a
                                            jae
804a6b1:
                 0a 00
                                            or
                                                    (%eax),%al
804a6b3:
                    6e 69 74 69 61 6c
                                                    $0x6c616974,0x69(%esi),%ebp
                 69
                                            imul
                 69 7a 65 5f 62 6f 6d
                                                    $0x6d6f625f,0x65(%edx),%edi
804a6ba:
                                            imul
                 62 3a
                                                    %edi,(%edx)
804a6c1:
                                            bound
804a6c3:
                 20 25 73 0a 00 4e
                                            and
                                                    %ah,0x4e000a73
804a6c9:
                 6f
                                            outsl
                                                    %ds:(%esi),(%dx)
                 20 75 73
                                                    %dh,0x73(%ebp)
804a6ca:
                                            and
                 65 72 69
                                                    804a739 <_IO_stdin_used+0x45d>
804a6cd:
                                            gs jb
804a6d0:
                 64 20 69 6e
                                            and
                                                    %ch,%fs:0x6e(%ecx)
804a6d4:
                 64 69 63 61 74 65 64
                                            imul
                                                    $0x2e646574,%fs:0x61(%ebx),%esp
804a6db:
                 2e
                 20 20
804a6dc:
                                            and
                                                    %ah,(%eax)
804a6de:
                 52
                                            push
                 65 73 75
804a6df:
                                            gs jae 804a757 <_I0_stdin_used+0x47b>
804a6e2:
                                                    (%dx),%es:(%edi)
                 6c
                                            insb
                 74 73
804a6e3:
                                            jе
                                                    804a758 <_I0_stdin_used+0x47c>
804a6e5:
                 20 6e 6f
                                            and
                                                    %ch,0x6f(%esi)
                                                    804a70a <_IO_stdin_used+0x42e>
804a74d <_IO_stdin_used+0x471>
804a6e8:
                 74 20
                                            jе
804a6ea:
                 76 61
                                            ibe
804a6ec:
                 6c
                                            insb
                                                    (%dx),%es:(%edi)
804a6ed:
                 69 64 61 74 65 64 00
                                            imul
                                                    $0x49006465,0x74(%ecx,%eiz,2),%esp
804a6f4:
                 49
804a6f5:
                 6e
                                            outsb
                                                    %ds:(%esi),(%dx)
804a6f6:
                 76 61
                                                    804a759 <_I0_stdin_used+0x47d>
                                            ibe
                                                    (%dx),%es:(%edi)
804a6f8:
                 6c
                                            insb
804a6f9:
                 69 64 20 6c 65 76 65
                                            imul
                                                    $0x6c657665,0x6c(%eax,%eiz,1),%esp
804a700:
                 6c
804a701:
                 2e 20 20
                                            and
                                                    %ah,%cs:(%eax)
804a704:
                 52
                                            push
                                                    %edx
                                            gs jae 804a77d <_I0_stdin_used+0x4a1>
804a705:
                 65 73 75
804a708:
                 6c
                                            insb
                                                    (%dx),%es:(%edi)
804a709:
                 74 73
                                            jе
                                                    804a77e <_I0_stdin_used+0x4a2>
804a70b:
                 20 6e 6f
                                            and
                                                    %ch,0x6f(%esi)
804a70e:
                                                    804a730 <_I0_stdin_used+0x454>
                 74 20
                                            jе
                                                    804a773 <_IO_stdin_used+0x497>
804a710:
                 76 61
                                            jbe
804a712:
                 6c
                                            insb
                                                    (%dx),%es:(%edi)
804a713:
                 69 64 61 74 65 64 00
                                                    $0x4b006465,0x74(%ecx,%eiz,2),%esp
                                            imul
804a71a:
                 4h
804a71b:
                 65 65 70 20
                                            gs gs jo 804a73f <_I0_stdin_used+0x463>
                                                    %ds:(%si),(%dx)
804a71f:
                 67 6f
                                            outsl
804a721:
                 69 6e 67 00 56 41 4c
                                            imul
                                                    $0x4c415600,0x67(%esi),%ebp
804a728:
                 49
                                            dec
                                                    %ecx
804a729:
                 44
                                            inc
                                                    %esp
804a72a:
                 00 00
                                            add
                                                    %al,(%eax)
804a72c:
                 57
                                            push
                                                    %edi
804a72d:
                 61
                                            popa
804a72e:
                 72 6e
                                                    804a79e <_I0_stdin_used+0x4c2>
                                            jb
804a730:
                 69 6e 67 3a 20 49 6e
                                            imul
                                                    $0x6e49203a,0x67(%esi),%ebp
                 70 75
                                                    804a7ae <_IO_stdin_used+0x4d2>
804a737:
                                            jo
804a739:
                 74 20
                                            jе
                                                    804a75b <_I0_stdin_used+0x47f>
804a73b:
                 73
                    74
                                                    804a7b1 <_I0_stdin_used+0x4d5>
                                            jae
                                                    804a7a8 < IO_stdin_used+0x4cc>
804a73d:
                 72 69
                                            ib
804a73f:
                                            outsb
                                                    %ds:(%esi),(%dx)
                 6e
804a740:
                 67 20 74 6f
                                            and
                                                    %dh,0x6f(%si)
804a744:
                                                    %ds:(%esi),(%dx)
                 6f
                                            outsl
804a745:
                 20 6c 61 72
                                                    %ch,0x72(%ecx,%eiz,2)
                                            and
                 67 65 2e 20 52 65
804a749:
                                                   %dl,%cs:0x65(%bp,%si)
                                            gs and
804a74f:
                 73 75
                                            jae
                                                    804a7c6 <_I0_stdin_used+0x4ea>
804a751:
                                                    (%dx),%es:(%edi)
                 6c
                                            insb
804a752:
                 74 73
                                                    804a7c7 <_I0_stdin_used+0x4eb>
                                            jе
804a754:
                 20 6e 6f
                                            and
                                                    %ch,0x6f(%esi)
804a757:
                 74 20
                                                    804a779 <_I0_stdin_used+0x49d>
                                            jе
804a759:
                 76 61
                                                    804a7bc <_I0_stdin_used+0x4e0>
                                            ibe
                                            insb
804a75h:
                                                    (%dx),%es:(%edi)
                 6c
                 69 64 61 74 65 64 00
804a75c:
                                            imul
                                                    $0x25006465,0x74(%ecx,%eiz,2),%esp
804a763:
                 25
804a764:
                 64 3a 25 78 3a 25 73
                                                    %fs:0x73253a78,%ah
                                            amp
804a76b:
                 00 53 65
                                                    %dl,0x65(%ebx)
                                            add
804a76e:
                 6e
                                            outsb
                                                    %ds:(%esi),(%dx)
804a76f:
                 74 20
                                            jе
                                                    804a791 < IO stdin used+0x4b5>
```

```
804a771:
                 65 78 70
                                                   804a7e4 <_I0_stdin_used+0x508>
                                            as is
804a774:
                                            insh
                                                   (%dx),%es:(%edi)
                 6c
804a775:
                 6f
                                            outsl
                                                   %ds:(%esi),(%dx)
804a776:
                 69 74 20 73 74 72 69
                                                   $0x6e697274,0x73(%eax,%eiz,1),%esi
                                            imul
804a77d:
                 6e
                 67 20 74 6f
804a77e:
                                            and
                                                   %dh,0x6f(%si)
804a782:
                 20 73 65
                                            and
                                                   %dh,0x65(%ebx)
804a785:
                 72
                   76
                                                   804a7fd < IO stdin used+0x521>
                                            jb
                 65 72 20
804a787:
                                            gs jb
                                                   804a7aa <_IO_stdin_used+0x4ce>
                 74 6f
                                                   804a7fb <_I0_stdin_used+0x51f>
804a78a:
                                            jе
804a78c:
                 20 62 65
                                            and
                                                   %ah,0x65(%edx)
804a78f:
                 20 76 61
                                            and
                                                   %dh,0x61(%esi)
804a792:
                                            insh
                                                   (%dx),%es:(%edi)
                 60
804a793:
                 69 64 61 74 65 64 2e
                                            imul
                                                   $0x2e6465,0x74(%ecx,%eiz,2),%esp
804a79a:
                 00
804a79b:
                 00 57 61
                                            add
                                                   %dl,0x61(%edi)
804a79e:
                                                   804a80e <_I0_stdin_used+0x532>
                 72 6e
                                            jb
                 69 6e 67 3a 20 55 6e
                                                   $0x6e55203a,0x67(%esi),%ebp
804a7a0:
                                            imul
804a7a7:
                 61
                                            popa
                                                   %ebp,0x20(%ebp,%eiz,2)
804a7a8:
                 62 6c 65 20
                                            bound
804a7ac:
                 74 6f
                                                   804a81d <_I0_stdin_used+0x541>
                                            jе
                                                   %dh,0x65(%ebx)
804a7ae:
                 20 73 65
                                            and
804a7b1:
                                                   %ds:(%esi),(%dx)
                 6e
                                            outsb
                                                   %ah,%fs:0x78(%ebp)
804a7b2:
                 64 20 65 78
                                            and
804a7b6:
                 70 6c
                                                   804a824 <_I0_stdin_used+0x548>
                                            jο
804a7b8:
                 6f
                                            outsl
                                                   %ds:(%esi),(%dx)
804a7b9:
                 69 74 20 73 74 72 69
                                            imul
                                                   $0x6e697274,0x73(%eax,%eiz,1),%esi
804a7c0:
                 6e
804a7c1:
                 67 20 74 6f
                                            and
                                                   %dh,0x6f(%si)
804a7c5:
                 20 67 72
                                                   %ah,0x72(%edi)
                                            and
804a7c8:
                 61
                                            popa
                 64 69 6e 67 20 73 65
804a7c9:
                                                   $0x72657320,%fs:0x67(%esi),%ebp
                                            imul
804a7d0:
                 72
804a7d1:
                 76 65
                                                   804a838 <_I0_stdin_used+0x55c>
                                            jbe
804a7d3:
                 72 3a
                                            jb
                                                   804a80f <_I0_stdin_used+0x533>
                                                   0x4e000a73,%ah
804a7d5:
                 0a 25 73 0a 00 4e
                                            ٥r
804a7db:
                 49
                                            dec
                                                   %ecx
804a7dc:
                 43
                                            inc
                                                   %ebx
804a7dd:
                 45
                                                   %ebp
                                            inc
804a7de:
                 20 4a 4f
                                            and
                                                   %cl,0x4f(%edx)
804a7e1:
                 42
                                            inc
                                                   %edx
804a7e2:
                 21 00
                                            and
                                                   %eax,(%eax)
                 50
                                                   %eax
804a7e4:
                                            push
                 72 6f
                                                   804a856 <_I0_stdin_used+0x57a>
804a7e5:
                                            jЬ
804a7e7:
                 67 72 61
                                            addr16
                                                   jb 804a84\overline{b} < 10_stdin_used+0x56f>
804a7ea:
                 6d
                                            insl
                                                   (%dx),%es:(%edi)
                 20 74 69 6d
                                                   %dh,0x6d(%ecx,%ebp,2)
804a7eb:
                                            and
                 65 64 20 6f 75
                                            gs and %ch,%fs:0x75(%edi)
804a7ef:
804a7f4:
                 74 20
                                            jе
                                                   804a816 <_I0_stdin_used+0x53a>
804a7f6:
                 61
                                            popa
804a7f7:
                 66 74 65
                                            data16 je 804a85f <_I0_stdin_used+0x583>
804a7fa:
                 72
                   20
                                            jb
                                                   804a81c <_I0_stdin_used+0x540>
804a7fc:
                 25 64 20 73 65
                                                   $0x65732064, %eax
                                            and
804a801:
                 63 6f 6e
                                            arpl
                                                   %bp,0x6e(%edi)
                 64 73 0a
804a804:
                                            fs jae 804a811 <_I0_stdin_used+0x535>
804a807:
                 00 25 25 25 30 32
                                            add
                                                   %ah,0x32302525
804a80d:
                 58
                                            pop
                                                   %eax
804a80e:
                 00 00
                                                   %al,(%eax)
                                            add
804a810:
                 45
                                            inc
                                                   %ebp
804a811:
                 72 72
                                            jb
                                                   804a885 <_I0_stdin_used+0x5a9>
804a813:
                 6f
                                                   %ds:(%esi),(%dx)
                                            outsl
                                                   804a850 <_IO_stdin_used+0x574>
804a814:
                 72 3a
                                            jb
                                                   %al,0x53(%esi,%ecx,2)
804a816:
                 20 44 4e 53
                                            and
804a81a:
                 20 75 6e
                                            and
                                                   %dh,0x6e(%ebp)
804a81d:
                 61
                                            popa
804a81e:
                 62 6c 65 20
                                            bound
                                                   %ebp,0x20(%ebp,%eiz,2)
804a822:
                 74 6f
                                            jе
                                                   804a893 <_I0_stdin_used+0x5b7>
804a824:
                 20 72 65
                                                   %dh,0x65(%edx)
                                            and
804a827:
                 73 6f
                                                   804a898 <_I0_stdin_used+0x5bc>
                                            iae
                                                   (%dx),%es:(%edi)
804a829:
                 6c
                                            insb
                 76 65
804a82a:
                                            jbe
                                                   804a891 <_I0_stdin_used+0x5b5>
804a82c:
                 20 61 64
                                            and
                                                   %ah,0x64(%ecx)
                                            fs jb
804a82f:
                 64 72 65
                                                   804a897 <_I0_stdin_used+0x5bb>
                                                   804a8a7 <_IO_stdin_used+0x5cb>
804a832:
                 73 73
                                            jae
                                                   %ah,0x6f(%esi)
804a834:
                 20 66 6f
                                            and
804a837:
                 72 20
                                            jb
                                                   804a859 < IO stdin used+0x57d>
```

```
804a839:
                  25 73 00 45 72
                                              and
                                                      $0x72450073,%eax
                                                      804a8af <_IO_stdin_used+0x5d3>
804a87c <_IO_stdin_used+0x5a0>
804a83e:
                                              jЬ
                  72 6f
804a840:
                  72 3a
                                              jb
804a842:
                  20 55 6e
                                              and
                                                      %dl,0x6e(%ebp)
804a845:
                  61
                                              popa
804a846:
                                              bound
                 62 6c 65 20
                                                      %ebp,0x20(%ebp,%eiz,2)
804a84a:
                  74 6f
                                                      804a8bb <_IO_stdin_used+0x5df>
                                              iе
804a84c:
                  20 63 6f
                                                      %ah,0x6f(%ebx)
                                              and
                                                      %ds:(%esi),(%dx)
804a84f:
                 6e
                                              outsb
804a850:
                                                      %ds:(%esi),(%dx)
                  6e
                                              outsb
804a851:
                 65 63 74 20 74
                                              arpl
                                                      %si,%gs:0x74(%eax,%eiz,1)
804a856:
                 6f
                                              outsl
                                                      %ds:(%esi),(%dx)
                  20 73 65
                                                      %dh,0x65(%ebx)
804a857:
                                              and
                                                      804a8d2 <_IO_stdin_used+0x5f6>
804a87f <_IO_stdin_used+0x5a3>
804a85a:
                  72 76
                                              jb
804a85c:
                  65 72 20
                                              gs jb
804a85f:
                  25 73 00 00 00
                                              and
                                                      $0x73,%eax
804a864:
                  45
                                                      %ebp
                                              inc
                  72 72
                                                      804a8d9 < I0_stdin_used + 0x5fd >
804a865:
                                              jЬ
                                                      %ds:(%esi),(%dx)
804a8a4 <_IO_stdin_used+0x5c8>
804a867:
                  6f
                                              outsl
804a868:
                  72 3a
                                              ib
                 20 52 65
73 75
                                                      %dl,0x65(%edx)
804a86a:
                                              and
804a86d:
                                              jae
                                                      804a8e4 <_I0_stdin_used+0x608>
804a86f:
                  6c
                                                      (%dx),%es:(%edi)
                                              insb
                                                      804a892 < IO_stdin_used+0x5b6>
804a8e8 < IO_stdin_used+0x60c>
804a8df < IO_stdin_used+0x603>
                 74 20
804a870:
                                              jе
804a872:
                  73
                    74
                                              jae
804a874:
                  72 69
                                              jb
804a876:
                  6e
                                              outsb
                                                      %ds:(%esi),(%dx)
                                                      %ah,0x6f(%bp,%di)
804a877:
                 67 20 63 6f
                                              and
804a87b:
                  6e
                                              outsb
                                                      %ds:(%esi),(%dx)
804a87c:
                 74 61
                                              jе
                                                      804a8df <_I0_stdin_used+0x603>
                  69 6e 73 20 61 6e 20
                                                      $0x206e6120,0x73(%esi),%ebp
804a87e:
                                              imul
804a885:
                  69 6c 6c 65 67 61 6c
                                              imul
                                                      $0x206c6167,0x65(%esp,%ebp,2),%ebp
804a88c:
                 20
804a88d:
                  6f
                                                      %ds:(%esi),(%dx)
                                              outsl
804a88e:
                  72 20
                                              jb
                                                      804a8b0 <_IO_stdin_used+0x5d4>
                 75 6e
804a890:
                                              jne
                                                      804a900 <_IO_stdin_used+0x624>
804a892:
                  70
                    72
                                                      804a906 <_I0_stdin_used+0x62a>
                                              jο
804a894:
                  69
                    6e 74 61 62 6c 65
                                              imul
                                                      $0x656c6261,0x74(%esi),%ebp
                  20 63 68
804a89b:
                                              and
                                                      %ah,0x68(%ebx)
804a89e:
                  61
                                              popa
                                                      804a902 <_I0_stdin_used+0x626>
804a89f:
                 72 61
                                              jb
804a8a1:
                  63 74 65 72
                                              arpl
                                                      %si,0x72(%ebp,%eiz,2)
804a8a5:
                  2e 00 00
                                                      %al,%cs:(%eax)
                                              add
804a8a8:
                  47
                                              inc
                                                      %edi
804a8a9:
                  45
                                              inc
                                                      %ebp
804a8aa:
                  54
                                              push
                                                      %esp
804a8ab:
                                                      %ch,(%edi)
                  20 2f
                                              and
804a8ad:
                  25
                    73 2f 73 75
                                                      $0x75732f73,%eax
                                              and
804a8b2:
                  62 6d 69
                                              bound
                                                      %ebp,0x69(%ebp)
                  74 72
                                                      804a929 <_I0_stdin_used+0x64d>
804a8b5:
                                              ie
                 2e 70 6c
804a8b7:
                                                      804a926 <_I0_stdin_used+0x64a>
                                              jo,pn
804a8ba:
                  2f
                                              das
804a8bb:
                  3f
                                              aas
804a8bc:
                  75 73
                                              ine
                                                      804a931 <_I0_stdin_used+0x655>
                                                      804a92a <_I0_stdin_used+0x64e>
                    72 69
                                              gs jb
804a8be:
                  65
804a8c1:
                  64 3d 25 73 26 6c
                                              fs cmp $0x6c267325,%eax
804a8c7:
                  61
                                              popa
804a8c8:
                 62 3d 25 73 26 72
                                              bound
                                                      %edi.0x72267325
                  65 73 75
                                              gs jae 804a946 <_I0_stdin_used+0x66a>
804a8ce:
804a8d1:
                 6c
                                              insb
                                                      (%dx),%es:(%edi)
804a8d2:
                  74
                                                      804a911 <_I0_stdin_used+0x635>
                                              jе
                                                      $0x75732673, \( \frac{7}{8} \) eax
804a8d4:
                  25
                    73 26 73 75
                                              and
804a8d9:
                 62 6d 69
                                              bound
                                                      %ebp,0x69(%ebp)
                                              jе
804a8dc:
                  74 3d
                                                      804a91b <_I0_stdin_used+0x63f>
                  73
                    75
                                                      804a955 <_IO_stdin_used+0x679>
804a8de:
                                              jae
                  62 6d 69
                                                      %ebp,0x69(%ebp)
804a8e0:
                                              bound
                                                      804a905 <_IO_stdin_used+0x629>
804a8e3:
                  74 20
                                              jе
804a8e5:
                  48
                                              dec
804a8e6:
                  54
                                              push
                                                      %esp
804a8e7:
                  54
                                              push
                                                      %esp
                  50
804a8e8:
                                              push
                                                      %eax
804a8e9:
                  2f
                                              das
804a8ea:
                  31 2e
                                                      %ebp,(%esi)
                                              xor
804a8ec:
                 30 0d 0a 0d 0a 00
                                                      %cl,0xa0d0a
                                              xor
                                                      $0x64252073,%eax
804a8f2:
                  25 73 20 25 64
                                              and
804a8f7:
                  20 25 5b 61 2d 7a
                                              and
                                                      %ah,0x7a2d615b
```

```
804a8fd:
                                              inc
                                                      %ecx
                  2d 7a 20 5d 00
00 45 72
 804a8fe:
                                                      $0x5d207a,%eax
                                              sub
 804a903:
                                              add
                                                      %al,0x72(%ebp)
 804a906:
                  72 6f
                                                      804a977 <_IO_stdin_used+0x69b>
                                              jЬ
                                              jb
 804a908:
                  72 3a
                                                      804a944 <_IO_stdin_used+0x668>
 804a90a:
                  20 48 54
                                                      %cl,0x54(%eax)
                                              and
 804a90d:
                  54
                                              push
                                                      %esp
 804a90e:
                  50
                                              push
                                                      %eax
                  20 72 65
 804a90f:
                                              and
                                                      %dh,0x65(%edx)
                  71 75
65 73 74
 804a912:
                                                      804a989 <_IO_stdin_used+0x6ad>
                                              jno
 804a914:
                                              gs jae 804a98b <_IO_stdin_used+0x6af>
                                              and
 804a917:
                  20 66 61
                                                      %ah,0x61(%esi)
                  69 6c 65 64 20 77 69
                                                      $0x74697720,0x64(%ebp,%eiz,2),%ebp
 804a91a:
                                              imul
 804a921:
                  74
 804a922:
                  68 20 65 72 72
                                                      $0x72726520
                                              push
 804a927:
                  6f
                                              outsl
                                                      %ds:(%esi),(%dx)
 804a928:
                  72 20
                                                      804a94a <_IO_stdin_used+0x66e>
                                              jb
                  25 64 3a 20 25
 804a92a:
                                              and
                                                      $0x25203a64,%eax
 804a92f:
                  73 00
                                                      804a931 <_I0_stdin_used+0x655>
                                              jae
                  0d 0a 00 4f 4b
                                                      $0x4b4f000a,%eax
 804a931:
                                              or
 804a936:
                  00 69 70
                                              add
                                                      %ch,0x70(%ecx)
 804a939:
                  61
                                              popa
 804a93a:
                  64 73 2e
                                              fs jae 804a96b <_IO_stdin_used+0x68f>
                                              jae 804a9a4 <_IO_stdin_used+0x6c8>
jae,pn 804a9ac <_IO_stdin_used+0x6d0>
 804a93d:
                  73 65
                                              jae
                  2e 73 6a
 804a93f:
                  74 75
                                                      804a9b9 <_IO_stdin_used+0x6dd>
 804a942:
                                              jе
 804a944:
                  2e 65 64 75 2e
                                              cs gs fs jne,pn 804a977 <_IO_stdin_used+0x69b>
 804a949:
                  63 6e 00
                                                      %bp,0x0(%esi)
                                              arpl
 804a94c:
                  45
                                              inc
                                                      %ebp
                  72 72
 804a94d:
                                              jb
                                                      804a9c1 <_I0_stdin_used+0x6e5>
                                                      %ds:(%esi\overline{)},(\overline{%}dx)
 804a94f:
                  6f
                                              outsl
 804a950:
                  72 3a
                                                      804a98c <_IO_stdin_used+0x6b0>
                                              jЬ
                  20 55 6e
 804a952:
                                              and
                                                      %dl,0x6e(%ebp)
 804a955:
                  61
                                              popa
                                                      %ebp,0x20(%ebp,%eiz,2)
804a9cb <_IO_stdin_used+0x6ef>
 804a956:
                  62 6c 65 20
                                              bound
 804a95a:
                  74 6f
                                              jе
                                                      %ah,0x6f(%ebx)
 804a95c:
                  20 63 6f
                                              and
                                                      %ds:(%esi),(%dx)
 804a95f:
                  6e
                                              outsb
                                                      %ds:(%esi),(%dx)
 804a960:
                  6e
                                              outsb
                  65 63 74 20 74
                                                      %si,%gs:0x74(%eax,%eiz,1)
 804a961:
                                              arpl
 804a966:
                  6f
                                              outsl
                                                      %ds:(%esi),(%dx)
 804a967:
                  20 73 65
                                              and
                                                      %dh,0x65(%ebx)
                                                      804a9e2 <_I0_stdin_used+0x706>
804a98f <_I0_stdin_used+0x6b3>
 804a96a:
                  72 76
                                              jb
                     72 20
 804a96c:
                  65
                                              gs jb
                                                      $0x64253a73, % eax
 804a96f:
                  25 73 3a 25 64
                                              and
 804a974:
                  00 0a
                                                      %cl,(%edx)
                                              add
 804a976:
                  41
                                              inc
                                                      %ecx
                  55
 804a977:
                                              push
                                                      %ebp
 804a978:
                  54
                                              push
                                                      %esp
 804a979:
                  4f
                                              dec
                                                      %edi
 804a97a:
                  52
                                              push
                                                      %edx
                  45
 804a97b:
                                              inc
                                                      %ebp
 804a97c:
                  53
                                              push
                                                      %ebx
 804a97d:
                  55
                                              push
                                                      %ebp
                  4c
 804a97e:
                                              dec
                                                      %esp
 804a97f:
                  54
                                              push
                                                      %esp
 804a980:
                  5f
                                              pop
                                                      %edi
 804a981:
                  53
                                              push
                                                      %ebx
                  54
 804a982:
                                              push
                                                      %esp
 804a983:
                  52
                                              push
                                                      %edx
 804a984:
                  49
                                              dec
                                                      %ecx
 804a985:
                  4e
                                              dec
                                                      %esi
 804a986:
                  47
                                              inc
                                                      %edi
                  3d 25 73 0a 00
 804a987:
                                                      $0xa7325,%eax
                                              cmp
                  62 75 66
 804a98c:
                                              bound
                                                      %esi,0x66(%ebp)
 804a98f:
                                                      (%dx),%es:(%edi)
                  6c
                                              insb
 804a990:
                  61
                                              popa
 804a991:
                  62 00
                                                      %eax,(%eax)
                                              bound
                  63 73 61
 804a993:
                                                      %si,0x61(%ebx)
                                              arpl
                                                      804aa08 <_IO_stdin_used+0x72c>
 804a996:
                  70 70
                                              įο
Disassembly of section .eh frame hdr:
0804a99c < .eh_frame_hdr>:
```

add

%ebx,(%ebx)

804a99c:

01 1b

```
804a99e:
                 03 3b
                                             add
                                                     (%ebx),%edi
804a9a0:
                 28 01
                                             suh
                                                     %al,(%ecx)
804a9a2:
                 00 00
                                             add
                                                     %al,(%eax)
804a9a4:
                 24 00
                                                     $0x0,%al
                                             and
804a9a6:
                 00 00
                                             add
                                                     %al,(%eax)
804a9a8:
                 54
                                             push
                                                     %esp
                                                     %st, %st(7)
804a9a9:
                 de ff
                                             fdivrp
804a9ab:
                 ff
                    44 01 00
                                                     0x0(%ecx,%eax,1)
                                             incl
                                                     %bh,0x68ffffe1(%edi)
804a9af:
                 00 bf e1 ff ff 68
                                             add
804a9b5:
                 01 00
                                             add
                                                     %eax,(%eax)
804a9b7:
                 00
                    ec
                                             add
                                                     %ch,%ah
804a9b9:
                 e1 ff
                                             loope
                                                     804a9ba < IO stdin used+0x6de>
                                                     -0x1dc30000(\sqrt[8]{ecx},\sqrt[8]{eax},1)
                 ff 84 01 00 00 3d e2
804a9bb:
                                             incl
804a9c2:
                 ff
                                             (bad)
804a9c3:
                 ff a0 01 00 00 98
                                                     *-0x67ffffff(%eax)
                                             jmp
804a9c9:
                 e2 ff
                                             loop
                                                     804a9ca <_I0_stdin_used+0x6ee>
804a9cb:
                                             (bad)
                 ff
                 bc 01 00 00 11
                                                     $0x11000001,%esp
804a9cc:
                                             \text{mov}
804a9d1:
                 e3 ff
                                                     804a9d2 <_I0_stdin_used+0x6f6>
                                             jecxz
804a9d3:
                 ff
                                             (bad)
804a9d4:
                 dc 01
                                             faddl
                                                     (%ecx)
804a9d6:
                 00 00
                                             add
                                                     %al,(%eax)
804a9d8:
                 2d e3 ff ff fc
                                                     $0xfcffffe3,%eax
                                             sub
                                                     %eax,(%eax)
804a9dd:
                 01 00
                                             add
                 00 4f e3
804a9df:
                                             add
                                                     %cl,-0x1d(%edi)
804a9e2:
                 ff
                                             (bad)
804a9e3:
                 ff
                    1c 02
                                             lcall
                                                     *(%edx,%eax,1)
                 00 00
804a9e6:
                                             add
                                                     %al,(%eax)
804a9e8:
                 c3
                                             ret
804a9e9:
                 e3 ff
                                                     804a9ea <_I0_stdin_used+0x70e>
                                             jecxz
804a9eb:
                 ff
                                             (bad)
                 3c 02
                                                     $0x2,%al
%al,(%eax)
804a9ec:
                                             cmp
804a9ee:
                 00 00
                                             add
804a9f0:
                 49
                                             dec
                                                     %ecx
804a9f1:
                 e4 ff
                                             in
                                                     $0xff,%al
804a9f3:
                    5c 02 00
                                             lcall
                                                     *0x0(%edx,%eax,1)
                 ff
804a9f7:
                 00 61 e4
                                             add
                                                     %ah,-0x1c(%ecx)
804a9fa:
                 ff
                                             (bad)
804a9fb:
                 ff
                                             (bad)
                 7c 02
804a9fc:
                                             jι
                                                     804aa00 <_I0_stdin_used+0x724>
804a9fe:
                 00 00
                                             add
                                                     %al,(%eax)
804aa00:
                                             int3
                 СС
804aa01:
                 e4 ff
                                                     $0xff,%al
                                             in
                                             lcall
804aa03:
                 ff 9c 02 00 00 2f e5
                                                     *-0x1ad10000(%edx,%eax,1)
804aa0a:
                 ff
                                             (bad)
804aa0b:
                 ff
                                             (bad)
804aa0c:
                 b8 02 00 00 5f
                                                     $0x5f000002,%eax
                                             mov
                 e5 ff
804aa11:
                                             in
                                                     $0xff,%eax
804aa13:
                 ff d4
                                             call
                                                     *%esp
804aa15:
                 02 00
                                             add
                                                     (%eax),%al
                 00 8f e5 ff ff f0
                                                     %cl,-0xf00001b(%edi)
804aa17:
                                             hhs
804aa1d:
                 02 00
                                             add
                                                     (%eax),%al
804aa1f:
                 00 bf e5 ff ff 0c
                                                     %bh,0xcffffe5(%edi)
                                             add
804aa25:
                 03 00
                                             add
                                                     (%eax),%eax
804aa27:
                 00 68 e6
                                                     %ch,-0x1a(%eax)
                                             add
804aa2a:
                 ff
                                             (bad)
804aa2b:
                 ff
                    2c 03
                                                     *(%ebx,%eax,1)
                                             ljmp
                                                     %al,(%eax)
804aa2e:
                 00 00
                                             add
804aa30:
                                             push
                                                     %ds
                 1e
804aa31:
                 e7 ff
                                             out
                                                     %eax,$0xff
                 ff 4c 03 00
                                                     0x0(%ebx,%eax,1)
804aa33:
                                             decl
                                                     %bh,(%edi,%eiz,8)
804aa37:
                 00 3c e7
                                             add
804aa3a:
                                             (bad)
                 ff
804aa3b:
                 ff 6c 03 00
                                             ljmp
                                                     *0x0(%ebx,%eax,1)
804aa3f:
                 00 7f e9
                                             add
                                                     %bh,-0x17(%edi)
804aa42:
                 ff
                                             (bad)
804aa43:
                 ff a4 03 00 00 c4 ea
                                             jmp
                                                     *-0x153c0000(%ebx,%eax,1)
804aa4a:
                 ff
                                             (bad)
804aa4b:
                 ff c4
                                             inc
                                                     %esp
                                                     (%eax),%eax
                 03 00
                                             add
804aa4d:
804aa4f:
                 00
                    23
                                             add
                                                     %ah, (%ebx)
804aa51:
                 ec
                                             in
                                                     (%dx),%al
804aa52:
                 ff
                                             (bad)
804aa53:
                 ff e4
                                             jmp
                                                     *%esp
804aa55:
                 03 00
                                             add
                                                     (%eax),%eax
804aa57:
                 00 45 ec
                                             add
                                                     %al,-0x14(%ebp)
```

```
804aa5a:
                                              (bad)
                  ff 00
 804aa5b:
                                              incl
                                                     (%eax)
 804aa5d:
                  04 00
                                             add
                                                     $0x0,%al
 804aa5f:
                  00 68 ec
                                                     %ch,-0x14(%eax)
                                             add
 804aa62:
                  ff
                                              (bad)
                  ff 20
 804aa63:
                                              jmp
                                                     *(%eax)
 804aa65:
                  04 00
                                              add
                                                     $0x0,%al
 804aa67:
                  00 33
                                                     %dh, (%ebx)
                                             add
                                                     (%dx),%eax
 804aa69:
                  ed
                                              in
                  ff
                                              (bad)
 804aa6a:
 804aa6b:
                  ff 40 04
                                              incl
                                                     0x4(%eax)
                                                     %al,(%eax)
                  00 00
 804aa6e:
                                             add
 804aa70:
                                                     $0xed,%cl
                  b1 ed
                                             mov
                                              (bad)
 804aa72:
                  ff
 804aa73:
                  ff 60 04
                                                     *0x4(%eax)
                                              jmp
 804aa76:
                  00 00
                                              add
                                                     %al,(%eax)
                                                     $0x80ffffee,%eax
 804aa78:
                  15 ee ff ff 80
                                             adc
 804aa7d:
                  04 00
                                              add
                                                     $0x0,%al
 804aa7f:
                  00 51 ef
                                              add
                                                     %dl,-0x11(%ecx)
                                              (bad)
 804aa82:
                  ff
                                                     *0x7d000004(%eax)
                  ff a0 04 00 00 7d
 804aa83:
                                              jmp
 804aa89:
                  f5
                                              cmc
 804aa8a:
                  ff
                                              (bad)
 804aa8b:
                  ff d0
                                              call
                                                     *%eax
 804aa8d:
                  04 00
                                                     $0x0,%al
                                             add
                                                     %bh,-0xf00000b(%ebx)
                  00 bb f5 ff ff f0
 804aa8f:
                                              add
 804aa95:
                  04 00
                                              add
                                                     $0x0,%al
                                                     %ah,-0x9(%ecx)
 804aa97:
                  00 61 f7
                                             add
 804aa9a:
                  ff
                                              (bad)
 804aa9b:
                  ff 10
                                              call
                                                     *(%eax)
                  05 00 00 e6 f7
 804aa9d:
                                             add
                                                     $0xf7e60000,%eax
                  ff
                                              (bad)
 804aaa2:
                  ff 30
 804aaa3:
                                              pushl
                                                     (%eax)
 804aaa5:
                  05 00 00 1e f8
                                              add
                                                     $0xf81e0000,%eax
 804aaaa:
                  ff
                                              (bad)
                                                     *0x5(%eax)
 804aaab:
                  ff 50 05
                                              call
 804aaae:
                  00 00
                                              add
                                                     %al,(%eax)
 804aab0:
                  6a f8
                                              push
                                                     $0xfffffff8
 804aab2:
                  ff
                                              (bad)
 804aab3:
                  ff 70 05
                                              pushl
                                                     0x5(%eax)
 804aab6:
                  00 00
                                              add
                                                     %al,(%eax)
 804aab8:
                  b4 f8
                                             moν
                                                     $0xf8,%ah
 804aaba:
                  ff
                                              (bad)
                  ff 90 05 00 00 24
 804aabb:
                                                     *0x24000005(%eax)
                                              call
 804aac1:
                  f9
                                              stc
 804aac2:
                  ff
                                              (bad)
 804aac3:
                  ff cc
                                             dec
                                                     %esp
                                              .byte 0x5
 804aac5:
                  05
Disassembly of section .eh_frame:
0804aac8 <__FRAME_END__-0x4b4>:
 804aac8:
                  14 00
                                             adc
                                                     $0x0,%al
                                                     %al,(%eax)
 804aaca:
                  00 00
                                             add
 804aacc:
                  00 00
                                              add
                                                     %al,(%eax)
 804aace:
                  00 00
                                                     %al, (%eax)
                                              add
 804aad0:
                  01 7a 52
                                                     %edi,0x52(%edx)
                                             add
                  00 01
 804aad3:
                                             add
                                                     %al,(%ecx)
 804aad5:
                  7c 08
                                                     804aadf <_IO_stdin_used+0x803>
                                              jι
 804aad7:
                  01 1b
                                             add
                                                     %ebx,(%ebx)
                                                     $0x4,%al
 804aad9:
                  0c 04
                                             or
 804aadb:
                  04 88
                                             add
                                                     $0x88,%al
 804aadd:
                  01 00
                                              add
                                                     %eax,(%eax)
                                                     %ah, (%eax)
                     20
 804aadf:
                  00
                                             add
 804aae1:
                  00 00
                                                     %al,(%eax)
                                             add
 804aae3:
                  00 1c 00
                                              add
                                                     %bl,(%eax,%eax,1)
 804aae6:
                  00 00
                                             add
                                                     %al,(%eax)
 804aae8:
                  08 dd
                                                     %bl,%ch
                                             or
                  ff
                                              (bad)
 804aaea:
                  ff 70 02
                                                     0x2(%eax)
 804aaeb:
                                             pushl
 804aaee:
                  00 00
                                             add
                                                     %al,(%eax)
 804aaf0:
                  00 0e
                                             add
                                                     %cl,(%esi)
 804aaf2:
                  08 46 0e
                                                     %al,0xe(%esi)
                                             or
 804aaf5:
                  0c 4a
                                              or
                                                     $0x4a,%al
```

ud2

804aaf7:

0f 0b

```
804aaf9:
                 74 04
                                             jе
                                                     804aaff <_I0_stdin_used+0x823>
804aafh:
                 78 00
                                                     804aafd < I0_stdin_used+0x821>
                                             js
804aafd:
                 3f
                                             aas
804aafe:
                 1a 3b
                                             sbb
                                                     (%ebx),%bh
                                                     (%edx),%dh
804ab00:
                 2a 32
                                             sub
804ab02:
                 24
                    22
                                             and
                                                     $0x22,%al
804ab04:
                 18 00
                                             sbb
                                                     %al,(%eax)
804ab06:
                 00
                    00
                                                     %al, (%eax)
                                             add
804ab08:
                 40
                                             inc
                                                     %eax
                                                     %al,(%eax)
                 00 00
804ab09:
                                             add
804ab0b:
                 00 4f e0
                                             add
                                                     %cl,-0x20(%edi)
804ab0e:
                 ff
                                             (bad)
                 ff 2d 00 00 00 00
804ab0f:
                                             limp
                                                     *0×0
804ab15:
                 41
                                             inc
                                                     %ecx
804ab16:
                 0e
                                             push
                                                     %CS
804ab17:
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
                                             or
804ab1d:
                 00 00
                                             add
                                                     %al,(%eax)
804ab1f:
                 00 18
                                             add
                                                     %bl,(%eax)
804ab21:
                 00
                    00
                                                     %al,(%eax)
                                             add
                 00 5c 00 00
                                                     %bl,0x0(%eax,%eax,1)
804ab23:
                                             add
                 00 60 e0
                                                     %ah,-0x20(%eax)
804ab27:
                                             add
804ab2a:
                 ff
                                             (bad)
804ab2b:
                 ff 51 00
                                                     *0x0(%ecx)
                                             call
                                                     %al,(%eax)
804ab2e:
                 00 00
                                             add
804ab30:
                 00 41 0e
                                                     %al,0xe(%ecx)
                                             add
804ab33:
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
                                             or
804ab39:
                 00 00
                                             add
                                                     %al,(%eax)
                                                     %bl,(%eax)
                 00 18
804ab3b:
                                             add
                                                     %al,(%eax)
804ab3d:
                 00 00
                                             add
804ab3f:
                 00
                    78 00
                                             add
                                                     %bh,0x0(%eax)
                 00 00
804ab42:
                                             add
                                                     %al,(%eax)
                 95
804ab44:
                                                     %eax,%ebp
                                             xcha
                 e0 ff
804ab45:
                                             loopne 804ab46 <_IO_stdin_used+0x86a>
804ab47:
                 ff 5b 00
                                             lcall
                                                     *0x0(%ebx)
                                                     %al,(%eax)
804ab4a:
                 00 00
                                             add
804ab4c:
                 00 41 0e
                                             add
                                                     %al,0xe(%ecx)
804ab4f:
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
                                             or
804ab55:
                 00
                    00
                                             add
                                                     %al, (%eax)
                                                     %bl,(%eax,%eax,1)
804ab57:
                 00 1c 00
                                             add
                 00 00
                                                     %al,(%eax)
804ab5a:
                                             add
804ab5c:
                 94
                                             xchg
                                                     %eax,%esp
                                                     %al,(%eax)
804ab5d:
                 00 00
                                             add
804ab5f:
                 00 d4
                                             add
                                                     %dl,%ah
                 e0 ff
804ab61:
                                             loopne 804ab62 <_IO_stdin_used+0x886>
804ab63:
                 ff
                                             (bad)
                                                     804ab66 <_IO_stdin_used+0x88a> %al,(%eax)
                 79
804ab64:
                    00
                                             ins
                 00 00
804ab66:
                                             add
                                                     %al,0xe(%ecx)
                 00 41 0e
804ab68:
                                             add
804ab6b:
                 08 85 02 42 0d 05
                                             or
                                                     %al,0x50d4202(%ebp)
                 02 75 c5
                                                     -0x3b(%ebp),%dh
804ab71:
                                             add
804ab74:
                 0c 04
                                                     $0x4,%al
                                             or
                 04 00
                                                     $0x0,%al
804ab76:
                                             add
804ab78:
                 1c 00
                                                     $0x0,%al
                                             sbb
804ab7a:
                 00 00
                                             add
                                                     %al,(%eax)
                 b4 00
804ab7c:
                                                     $0x0,%ah
                                             mov
804ab7e:
                 00 00
                                             add
                                                     %al,(%eax)
804ab80:
                 2d
                    e1 ff ff 1c
                                                     $0x1cffffe1,%eax
                                             sub
                                                     %al,(%eax)
804ab85:
                 00 00
                                             add
804ab87:
                 00 00
                                                     %al,(%eax)
                                             add
804ab89:
                 41
                                             inc
                                                     %ecx
804ab8a:
                                                     %CS
                 0e
                                             push
804ab8b:
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
                                             or
804ab91:
                 58
                                             pop
                                                     %eax
804ab92:
                 c5 0c 04
                                             lds
                                                     (%esp,%eax,1),%ecx
                 04 00
804ab95:
                                             add
                                                     $0x0,%al
804ab97:
                 00 1c 00
                                                     %bl,(%eax,%eax,1)
                                             add
804ab9a:
                 00 00
                                             add
                                                     %al,(%eax)
804ab9c:
                 d4 00
                                             aam
                                                     $0x0
804ab9e:
                 00 00
                                             add
                                                     %al,(%eax)
                 29 e1
804aha0:
                                             sub
                                                     %esp,%ecx
                 ff
                                             (bad)
804aba2:
804aba3:
                 ff 22
                                             jmp
                                                     *(%edx)
804aba5:
                 00 00
                                             add
                                                     %al,(%eax)
804aba7:
                 00 00
                                                     %al,(%eax)
                                             add
804aba9:
                 41
                                             inc
                                                     %ecx
804abaa:
                 0e
                                             push
                                                     %CS
```

```
804abab:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
804abb1:
                                                    %esi
                 5e
                                             pop
                 c5 0c 04
804abb2:
                                             lds
                                                    (%esp,%eax,1),%ecx
804abb5:
                 04 00
                                            add
                                                    $0x0,%al
                                                    %bl,(%eax,%eax,1)
804abb7:
                 00 1c 00
                                            add
804abba:
                 00 00
                                             add
                                                    %al,(%eax)
804abbc:
                 f4
                                            hlt
804abbd:
                 00 00
                                             add
                                                    %al,(%eax)
804abbf:
                 00 2b
                                            add
                                                    %ch, (%ebx)
                                                    804abc2 <_I0_stdin_used+0x8e6>
804abc1:
                 e1 ff
                                             loope
804abc3:
                 ff
                    74 00 00
                                             pushl
                                                    0x0(%eax,%eax,1)
804abc7:
                 00 00
                                            add
                                                    %al,(%eax)
804abc9:
                 41
                                             inc
                                                    %ecx
804abca:
                 0e
                                             push
                                                    %CS
804abcb:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                             or
804abd1:
                 02 70 c5
                                            add
                                                    -0x3b(%eax),%dh
                 0c 04
804abd4:
                                                    $0x4,%al
                                            ٥r
                 04 00
                                             add
804abd6:
                                                    $0x0,%al
804abd8:
                 1c
                    00
                                                    $0x0,%al
                                             sbb
                                                    %al,(%eax)
804abda:
                 00 00
                                            add
                 14 01
804abdc:
                                             adc
                                                    $0x1,%al
804abde:
                 00 00
                                            add
                                                    %al,(%eax)
804abe0:
                 7f e1
                                                    804abc3 <_I0_stdin_used+0x8e7>
                                             jg
804abe2:
                 ff
                                             (bad)
                 ff 86 00 00 00 00
804abe3:
                                                    0x0(%esi)
                                             incl
804abe9:
                 41
                                                    %ecx
                                             inc
804abea:
                 0e
                                            push
                                                    %CS
804abeb:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
804abf1:
                 02 82 c5 0c 04 04
                                            add
                                                    0x4040cc5(%edx),%al
804abf7:
                 00
                    1c 00
                                                    %bl,(%eax,%eax,1)
                                             add
                 00 00
804abfa:
                                            add
                                                    %al,(%eax)
                                                    $0x1,%al
%al,(%eax)
                 34 01
804abfc:
                                            xor
                 00 00
804abfe:
                                             add
804ac00:
                 e5 e1
                                                    $0xe1,%eax
                                             in
804ac02:
                 ff
                                             (bad)
804ac03:
                 ff 18
                                                    *(%eax)
                                             lcall
804ac05:
                 00 00
                                             add
                                                    %al,(%eax)
804ac07:
                 00 00
                                             add
                                                    %al, (%eax)
804ac09:
                 41
                                                    %ecx
                                             inc
804ac0a:
                 0e
                                             push
                                                    %CS
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804ac0b:
                                             or
804ac11:
                 54
                                            push
                                                    %esp
804ac12:
                 c5 0c 04
                                             lds
                                                    (%esp,%eax,1),%ecx
                 04 00
804ac15:
                                            add
                                                    $0x0,%al
804ac17:
                 00 1c 00
                                             add
                                                    %bl,(%eax,%eax,1)
                                                    %al,(%eax)
                 00 00
804ac1a:
                                             add
804ac1c:
                 54
                                            push
                                                    %esp
                 01 00
804ac1d:
                                             add
                                                    %eax,(%eax)
804ac1f:
                 00
                    dd
                                             add
                                                    %bl,%ch
                                                    804ac22 <_I0_stdin_used+0x946>
804ac21:
                 e1 ff
                                             loope
                                                    *0x0(%ebx)
                 ff 6b 00
804ac23:
                                             limp
                                                    %al,(%eax)
804ac26:
                 00 00
                                             add
804ac28:
                 00 41 0e
                                                    %al,0xe(%ecx)
                                            add
804ac2b:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
804ac31:
                 02 67 c5
                                                    -0x3b(%edi),%ah
                                            add
804ac34:
                 0c 04
                                                    $0x4,%al
                                             or
804ac36:
                 04 00
                                             add
                                                    $0x0,%al
                                                    %al,(%eax)
804ac38:
                 18 00
                                             sbb
                 00 00
804ac3a:
                                            add
                                                    %al,(%eax)
804ac3c:
                 74 01
                                                    804ac3f <_I0_stdin_used+0x963>
                                             jе
                 00 00
                                            add
                                                    %al,(%eax)
804ac3e:
                                                    %ah,%dl
804ac40:
                 28 e2
                                             sub
804ac42:
                                             (bad)
                 ff
804ac43:
                 ff 63 00
                                             jmp
                                                    *0x0(%ebx)
                                                    %al,(%eax)
804ac46:
                 00 00
                                             add
804ac48:
                 00 41 0e
                                                    %al,0xe(%ecx)
                                            add
804ac4b:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                             or
804ac51:
                 00 00
                                             add
                                                    %al,(%eax)
                                                    %bl,(%eax)
804ac53:
                 00 18
                                            add
                                                    %al,(%eax)
                 00 00
                                             add
804ac55:
                 00 90 01 00 00 6f
                                                    %dl,0x6f000001(%eax)
804ac57:
                                            add
804ac5d:
                 e2 ff
                                             loop
                                                    804ac5e <_I0_stdin_used+0x982>
                 ff 30
804ac5f:
                                            pushl
                                                    (%eax)
                 00 00
804ac61:
                                                    %al,(%eax)
                                            add
804ac63:
                 00 00
                                             add
                                                    %al,(%eax)
804ac65:
                 41
                                             inc
                                                    %ecx
```

```
804ac66:
                                             push
                                                    %CS
                                                    %al,0x50d4202(%ebp)
                 08 85 02 42 0d 05
804ac67:
                                             ٥r
804ac6d:
                 00 00
                                             add
                                                    %al,(%eax)
804ac6f:
                 00 18
                                                    %bl, (%eax)
                                             add
                                                    %al,(%eax)
804ac71:
                 00 00
                                             add
                 00 ac 01 00 00 83 e2
                                                    %ch,-0x1d7d0000(%ecx,%eax,1)
804ac73:
                                             add
804ac7a:
                 ff
                                             (bad)
804ac7b:
                 ff 30
                                             pushl
                                                    (%eax)
                                                    %al,(%eax)
804ac7d:
                 00 00
                                             add
                 00 00
                                                    %al,(%eax)
804ac7f:
                                             add
804ac81:
                 41
                                             inc
                                                    %ecx
804ac82:
                 0e
                                             push
                                                    %CS
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804ac83:
                                             ٥r
804ac89:
                 00 00
                                             add
                                                    %al,(%eax)
804ac8b:
                 00 18
                                                    %bl,(%eax)
                                             add
                                                    %al,(%eax)
804ac8d:
                 00 00
                                             add
804ac8f:
                 00 c8
                                             add
                                                    %cl,%al
804ac91:
                 01 00
                                             add
                                                    %eax,(%eax)
804ac93:
                 00
                    97 e2 ff ff 30
                                                    %dl,0x30ffffe2(%edi)
                                             add
                 00 00
804ac99:
                                             add
                                                    %al, (%eax)
804ac9b:
                 00 00
                                             add
                                                    %al,(%eax)
804ac9d:
                 41
                                             inc
                                                    %ecx
804ac9e:
                 0e
                                             push
                                                    %CS
804ac9f:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                             or
                 00 00
804aca5:
                                             add
                                                    %al,(%eax)
804aca7:
                 00 1c 00
                                             add
                                                    %bl,(%eax,%eax,1)
804acaa:
                 00 00
                                             add
                                                    %al,(%eax)
                 e4 01
804acac:
                                                    $0x1,%al
                                             in
804acae:
                 00 00
                                             add
                                                    %al, (%eax)
804acb0:
                 ab
                                                    %eax,%es:(%edi)
                                             stos
804acb1:
                 e2 ff
                                             loop
                                                    804acb2 <_I0_stdin_used+0x9d6>
                 ff a9 00 00 00 00
                                                    *0x0(%ecx)
804ach3:
                                             limp
804acb9:
                 41
                                             inc
                                                    %ecx
804acba:
                 0e
                                             push
804acbb:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                             or
                                                    0x4040cc5(%ebp),%ah
804acc1:
                 02 a5 c5 0c 04 04
                                            add
804acc7:
                 00 1c 00
                                             add
                                                    %bl,(%eax,%eax,1)
804acca:
                 00 00
                                             add
                                                    %al, (%eax)
804accc:
                 04 02
                                             add
                                                    $0x2,%al
                                                    %al,(%eax)
                 00 00
804acce:
                                             add
804acd0:
                 34 e3
                                             xor
                                                    $0xe3,%al
804acd2:
                                             (bad)
804acd3:
                 ff b6 00 00 00 00
                                             pushl
                                                    0x0(%esi)
804acd9:
                 41
                                             inc
                                                    %ecx
804acda:
                 0e
                                             push
                                                    %CS
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804acdb:
                                             or
                 02 b2 c5 0c 04 04
804ace1:
                                                    0x4040cc5(%edx),%dh
                                             add
                 00 1c 00
                                                    %bl,(%eax,%eax,1)
804ace7:
                                             add
804acea:
                 00 00
                                             add
                                                    %al,(%eax)
                 24 02
                                                    $0x2,%al
804acec:
                                             and
                                                    %al,(%eax)
                 00 00
804acee:
                                             bbs
                 ca e3 ff
804acf0:
                                             lret
                                                    $0xffe3
804acf3:
                 ff 1e
                                             lcall
                                                    *(%esi)
                                                    %al,(%eax)
%al,(%eax)
804acf5:
                 00 00
                                             add
                 00 00
804acf7:
                                            add
804acf9:
                 41
                                             inc
                                                    %ecx
804acfa:
                 0e
                                             push
                                                    %CS
804acfb:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                             or
804ad01:
                 5a
                                             pop
                                                    %edx
804ad02:
                 c5 0c 04
                                             lds
                                                    (%esp,%eax,1),%ecx
804ad05:
                 04 00
                                             add
                                                    $0x0,%al
                                                    %dh, (%eax,%eax,1)
804ad07:
                 00 34 00
                                             add
804ad0a:
                 00 00
                                                    %al,(%eax)
                                             add
804ad0c:
                 44
                                             inc
                                                    %esp
                 02 00
                                                    (%eax),%al
804ad0d:
                                             add
804ad0f:
                                                    %cl,%aĺ
                 00 c8
                                             add
804ad11:
                 e3 ff
                                             jecxz
                                                    804ad12 <_I0_stdin_used+0xa36>
                                                    0x2(%ebx)
804ad13:
                 ff
                    43 02
                                             incl
804ad16:
                 00 00
                                                    %al,(%eax)
                                             add
                 00 44 0c 01
00 47 10
804ad18:
                                             add
                                                    %al,0x1(%esp,%ecx,1)
804ad1c:
                                             add
                                                    %al,0x10(%edi)
804ad1f:
                 05 02 75 00 44
                                             add
                                                    $0x44007502,%eax
                 0f 03 75 78
804ad24:
                                             lsl
                                                    0x78(%ebp),%esi
804ad28:
                 06
                                             push
                                                    %es
                                                    %al,(%ebx)
804ad29:
                 10 03
                                             adc
804ad2b:
                 02 75 7c
                                                    0x7c(%ebp),%dh
                                             add
```

```
804ad2e:
                 03 2e
                                             add
                                                    (%esi),%ebp
                 02 c1
804ad30:
                                             add
                                                    %cl,%al
804ad32:
                 0c 01
                                             or
                                                    $0x1,%al
804ad34:
                 00 41 c3
                                             add
                                                    %al,-0x3d(%ecx)
804ad37:
                 41
                                                    %есх
                                             inc
                 c5 43 0c
                                                    0xc(%ebx),%eax
804ad38:
                                             lds
804ad3b:
                 04 04
                                             add
                                                    $0x4,%al
804ad3d:
                 00 00
                                                    %al, (%eax)
                                             add
                                                    %bl,(%eax,%eax,1)
804ad3f:
                 00 1c 00
                                             add
804ad42:
                 00 00
                                                    %al,(%eax)
                                             add
804ad44:
                 7c 02
                                             jι
                                                    804ad48 <_IO_stdin_used+0xa6c>
804ad46:
                 00 00
                                                    %al,(%eax)
                                             add
                                                    %cl,%ebp
804ad48:
                 d3 e5
                                             shl
804ad4a:
                 ff
                                             (bad)
804ad4b:
                 ff 45 01
                                             incl
                                                    0x1(%ebp)
804ad4e:
                 00 00
                                             add
                                                    %al,(%eax)
804ad50:
                 00 41 0e
                                                    %al,0xe(%ecx)
                                             add
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804ad53:
                                             or
804ad59:
                 03 41 01
                                                    0x1(%ecx),%eax
                                             add
                 c5 0c 04
804ad5c:
                                             lds
                                                    (%esp,%eax,1),%ecx
                                             add
                                                    $0x1c,%al
804ad5f:
                 04 1c
804ad61:
                 00 00
                                             add
                                                    %al,(%eax)
804ad63:
                 00 9c 02 00 00 f8 e6
                                                    %bl,-0x19080000(%edx,%eax,1)
                                             add
804ad6a:
                                             (bad)
                 ff
804ad6b:
                 ff 5f 01
                                                    *0x1(%edi)
                                             lcall
804ad6e:
                 00 00
                                             add
                                                    %al,(%eax)
804ad70:
                 00 41 0e
                                             add
                                                    %al,0xe(%ecx)
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804ad73:
                                             or
                                             add
804ad79:
                 03 5b 01
                                                    0x1(%ebx),%ebx
804ad7c:
                 с5
                    0c 04
                                             lds
                                                     (%esp,%eax,1),%ecx
                                                    $0x18,%al
804ad7f:
                 04 18
                                             add
                 00 00
804ad81:
                                             add
                                                    %al,(%eax)
                 00 bc 02 00 00 37 e8
804ad83:
                                             add
                                                    %bh,-0x17c90000(%edx,%eax,1)
804ad8a:
                 ff
                                             (bad)
                 ff
804ad8b:
                    22
                                                    *(%edx)
                                             ami
804ad8d:
                 00 00
                                                    %al,(%eax)
                                             add
804ad8f:
                 00 00
                                             add
                                                    %al,(%eax)
804ad91:
                 41
                                             inc
                                                    %ecx
804ad92:
                 0e
                                                    %CS
                                             push
                 08 85 02 42 0d 05
804ad93:
                                                    %al,0x50d4202(%ebp)
                                             or
804ad99:
                 00 00
                                             add
                                                    %al,(%eax)
                                                    %bl,(%eax,%eax,1)
804ad9b:
                 00 1c 00
                                             add
804ad9e:
                 00 00
                                                    %al,(%eax)
                                             add
                                             fadds
804ada0:
                 d8 02
                                                    (%edx)
804ada2:
                 00 00
                                             add
                                                    %al,(%eax)
804ada4:
                 3d
                    e8 ff ff 23
                                                    $0x23ffffe8,%eax
                                             cmp
804ada9:
                 00 00
                                             add
                                                    %al,(%eax)
                 00 00
                                                    %al,(%eax)
804adab:
                                             add
804adad:
                 41
                                             inc
                                                    %ecx
804adae:
                 0e
                                             push
                                                    %CS
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804adaf:
                                             or
804adb5:
                 5f
                                             pop
                                                    %edi
804adb6:
                 c5 0c 04
                                                     (%esp,%eax,1),%ecx
                                             lds
                                                    $0x0,%al
%bl,(%eax,%eax,1)
804adb9:
                 04 00
                                             add
                 00 1c 00
804adbb:
                                             add
804adbe:
                 00 00
                                             add
                                                    %al,(%eax)
804adc0:
                 f8
                                             clc
804adc1:
                 02 00
                                                    (%eax),%al
                                             add
                 00 40 e8
                                                    %al,-0x18(%eax)
804adc3:
                                             add
804adc6:
                 ff
                                             (bad)
                 ff cb
804adc7:
                                             dec
                                                     %ebx
804adc9:
                 00 00
                                             add
                                                    %al,(%eax)
804adcb:
                 00 00
                                                    %al,(%eax)
                                             add
804adcd:
                 41
                                             inc
                                                    %ecx
804adce:
                 0e
                                             push
                                                    %CS
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804adcf:
                                             or
804add5:
                 02 c7
                                             add
                                                    %bh,%al
804add7:
                 с5
                    0c 04
                                             lds
                                                     (%esp,%eax,1),%ecx
804adda:
                 04 00
                                             add
                                                    $0x0,%al
                                                    $0x0,%al
%al,(%eax)
804addc:
                 1c 00
                                             sbb
                 00 00
804adde:
                                             add
                                                    %al,(%ebx)
804ade0:
                 18 03
                                             sbb
                                                    %al,(%eax)
804ade2:
                 00 00
                                             add
804ade4:
                                                    804adce <_I0_stdin_used+0xaf2>
                 eb e8
                                             jmp
804ade6:
                 ff
                                             (bad)
804ade7:
                 ff
                                             (bad)
```

```
804ade8:
                 7e 00
                                            ile
                                                    804adea <_I0_stdin_used+0xb0e>
                                                    %al,(%eax)
                 00 00
804adea:
                                            hhs
804adec:
                 00 41 0e
                                            add
                                                    %al,0xe(%ecx)
804adef:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
                 02 7a c5
                                                    -0x3b(%edx),%bh
804adf5:
                                            add
                 0c 04
804adf8:
                                            or
                                                    $0x4,%al
                 04 00
804adfa:
                                            add
                                                    $0x0,%al
804adfc:
                 1c
                    00
                                                    $0x0,%al
                                            sbb
                                                    %al,(%eax)
804adfe:
                 00 00
                                            add
                                                    %al,(%ebx)
804ae00:
                 38 03
                                            cmp
804ae02:
                 00 00
                                            add
                                                    %al, (%eax)
804ae04:
                 49
                                            dec
                                                    %ecx
804ae05:
                 e9 ff ff 64 00
                                                    869ae09 <_end+0x64df85>
                                            jmp
804ae0a:
                 00 00
                                            add
                                                    %al,(%eax)
804ae0c:
                 00 41 0e
                                                    %al,0xe(%ecx)
                                            add
804ae0f:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
804ae15:
                 02 60 c5
                                                    -0x3b(%eax),%ah
                                            add
804ae18:
                 0c 04
                                            or
                                                    $0x4,%al
804ae1a:
                 04 00
                                                    $0x0,%al
                                            add
                                                    $0x0,%al
804ae1c:
                 1c 00
                                            sbb
                                                    %al,(%eax)
                 00 00
804ae1e:
                                            add
804ae20:
                 58
                                            pop
                                                    %eax
804ae21:
                 03 00
                                                    (%eax),%eax
                                            add
804ae23:
                 00 8d e9 ff ff 3c
                                                    %cl,0x3cffffe9(%ebp)
                                            add
804ae29:
                 01 00
                                                    %eax,(%eax)
                                            add
804ae2b:
                 00 00
                                            add
                                                    %al,(%eax)
804ae2d:
                 41
                                            inc
                                                    %ecx
804ae2e:
                 0e
                                            push
                                                    %CS
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
804ae2f:
                                            or
804ae35:
                 03 38
                                            add
                                                    (%eax),%edi
                 01 c5
804ae37:
                                            add
                                                    %eax,%ebp
804ae39:
                 0c 04
                                                    $0x4,%al
                                            ٥r
                 04 2c
804ae3b:
                                            add
                                                    $0x2c,%al
804ae3d:
                 00 00
                                            add
                                                    %al,(%eax)
                 00 78 03
804ae3f:
                                            add
                                                    %bh,0x3(%eax)
804ae42:
                 00 00
                                            add
                                                    %al,(%eax)
804ae44:
                 a9 ea ff ff 2c
                                            test
                                                    $0x2cffffea,%eax
804ae49:
                 06
                                            push
                                                    %es
                                                    %al,(%eax)
804ae4a:
                 00 00
                                            add
                 00 41 0e
                                                    %al,0xe(%ecx)
804ae4c:
                                            add
                 08 85 02 42 0d 05
804ae4f:
                                            or
                                                    %al,0x50d4202(%ebp)
804ae55:
                 49
                                            dec
                                                    %ecx
804ae56:
                 87 03
                                                    %eax,(%ebx)
                                            xchq
                 86 04 83
804ae58:
                                                    %al,(%ebx,%eax,4)
                                            xchg
804ae5b:
                 05 03 1c 06 c3
                                            add
                                                    $0xc3061c03,%eax
804ae60:
                 41
                                            inc
                                                    %ecx
                                                    $0x41,-0x39(%ecx)
804ae61:
                 c6 41 c7 41
                                            movb
804ae65:
                 c5 0c 04
                                                    (%esp,%eax,1),%ecx
                                            lds
804ae68:
                 04 00
                                            add
                                                    $0x0,%al
                 00 00
                                                    %al,(%eax)
804ae6a:
                                            add
                                                    $0x0,%al
%al,(%eax)
                 1c 00
804ae6c:
                                            sbb
                 00 00
804ae6e:
                                            add
                 a8 03
804ae70:
                                                    $0x3,%al
                                            test
                                                    %al,(%eax)
804ae72:
                 00 00
                                            add
804ae74:
                 a5
                                            movsl
                                                    %ds:(%esi),%es:(%edi)
804ae75:
                 f0 ff
                                            lock (bad)
                                             (bad)
804ae77:
                 ff
804ae78:
                 3e 00 00
                                                    %al,%ds:(%eax)
                                            add
                 00 00
804ae7b:
                                            bba
                                                    %al,(%eax)
804ae7d:
                 41
                                            inc
                                                    %ecx
804ae7e:
                 0e
                                            push
                                                    %CS
804ae7f:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
804ae85:
                 7a c5
                                                    804ae4c <_I0_stdin_used+0xb70>
                                            jр
                                                    $0x4,%al
804ae87:
                 0c 04
                                            or
                 04 00
                                                    $0x0,%al
804ae89:
                                            add
                                                    %bl,(%eax,%eax,1)
804ae8b:
                 00 1c 00
                                            add
                                                    %al,(%eax)
804ae8e:
                 00 00
                                            add
804ae90:
                 с8
                    03 00 00
                                            enter
                                                    $0x3,$0x0
804ae94:
                 c3
                                            ret
804ae95:
                 f0 ff
                                            lock (bad)
                 ff a6 01 00 00 00
                                                    *0x1(%esi)
804ae97:
                                            jmp
804ae9d:
                                            inc
                                                    %ecx
804ae9e:
                 0e
                                                    %CS
                                            push
804ae9f:
                 08 85 02 42 0d 05
                                                    %al,0x50d4202(%ebp)
                                            or
804aea5:
                 03 a2 01 c5 0c 04
                                            add
                                                    0x40cc501(%edx),%esp
804aeab:
                 04 1c
                                            add
                                                    $0x1c,%al
```

```
804aead:
                 00 00
                                              add
                                                     %al,(%eax)
804aeaf:
                 00 e8
                                              hhs
                                                     %ch,%al
804aeb1:
                 03 00
                                              add
                                                     (%eax),%eax
804aeb3:
                 00 49 f2
                                                     %cl,-0xe(%ecx)
                                              add
804aeb6:
                 ff
                                              (bad)
                 ff 85 00 00 00 00
                                                     0x0(%ebp)
804aeb7:
                                              incl
804aebd:
                 41
                                              inc
                                                     %ecx
804aebe:
                 0e
                                              push
                                                     %CS
                 08 85 02 42 0d 05
804aebf:
                                                     %al,0x50d4202(%ebp)
                                              or
                                              \operatorname{\mathsf{add}}\nolimits
804aec5:
                 02 81 c5 0c 04 04
                                                     0x4040cc5(%ecx),%al
804aecb:
                 00
                    1c 00
                                              add
                                                     %bl,(%eax,%eax,1)
                                                     %al,(%eax)
                 00 00
804aece:
                                              add
                                                     %al,(%eax,%eax,1)
%ch,0x38ffffff2(%esi)
                 08 04 00
804aed0:
                                              ٥r
                 00 ae f2 ff ff 38
804aed3:
                                              add
                                                     %al,(%eax)
804aed9:
                 00 00
                                              add
804aedb:
                 00 00
                                              add
                                                     %al,(%eax)
804aedd:
                 41
                                                     %ecx
                                              inc
804aede:
                 0e
                                              push
                                                     %CS
804aedf:
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
                                              or
804aee5:
                 74 c5
                                              ie
                                                     804aeac <_I0_stdin_used+0xbd0>
                 0c 04
                                                     $0x4,%al
804aee7:
                                              or
804aee9:
                 04 00
                                              add
                                                     $0x0,%al
804aeeb:
                 00 1c 00
                                                     %bl,(%eax,%eax,1)
                                              add
                                                     %al,(%eax)
804aeee:
                 00 00
                                              add
804aef0:
                 28 04 00
                                                     %al,(%eax,%eax,1)
                                              sub
804aef3:
                 00 c6
                                              add
                                                     %al,%dh
804aef5:
                 f2
                    ff
                                              repnz (bad)
                                                     0x0(%eax,%eax,1)
804aef7:
                 ff 4c 00 00
                                              decl
804aefb:
                 00 00
                                              add
                                                     %al,(%eax)
804aefd:
                 41
                                                     %ecx
                                              inc
804aefe:
                 0e
                                              push
                                                     %CS
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
804aeff:
                                              ٥r
                 02 48 c5
804af05:
                                              add
                                                     -0x3b(%eax),%cl
804af08:
                 0c 04
                                                     $0x4,%al
                                              or
                                                     $0x0,%al
$0x0,%al
                 04 00
804af0a:
                                              add
804af0c:
                 1c 00
                                              shh
804af0e:
                 00 00
                                              add
                                                     %al,(%eax)
804af10:
                 48
                                              dec
                                                     %eax
804af11:
                 04 00
                                             add
                                                     $0x0,%al
                                              add
                 00 f2
804af13:
                                                     %dh,%dl
804af15:
                 f2 ff
                                              repnz (bad)
804af17:
                 ff
                                              (bad)
804af18:
                 3c 00
                                                     $0x0,%al
                                              cmp
                                                     %al,(%eax)
804af1a:
                 00 00
                                              add
804af1c:
                 00 41 0e
                                              add
                                                     %al,0xe(%ecx)
804af1f:
                 08 85 02 42 0d 05
                                                     %al,0x50d4202(%ebp)
                                              or
804af25:
                 78 c5
                                                     804aeec <_IO_stdin_used+0xc10>
                                              js
                                                     $0x4,%al
804af27:
                 0c 04
                                              or
804af29:
                 04 00
                                              add
                                                     $0x0,%al
                 00 38
                                                     %bh, (%eax)
804af2b:
                                              add
                                                     %al,(%eax)
804af2d:
                 99 99
                                              hhs
                 00 68 04
804af2f:
                                              add
                                                     %ch,0x4(%eax)
804af32:
                 00 00
                                                     %al, (%eax)
                                              add
804af34:
                 1c f3
                                              sbb
                                                     $0xf3,%al
                                              (bad)
804af36:
                 ff
804af37:
                 ff 61 00
                                              jmp
                                                     *0x0(%ecx)
804af3a:
                 00 00
                                                     %al,(%eax)
                                              add
804af3c:
                 00 41 0e
                                                     %al.0xe(%ecx)
                                              add
                 08 85 02 41 0e 0c
804af3f:
                                                     %al,0xc0e4102(%ebp)
                                              or
804af45:
                 87 03
                                              xchg
                                                     %eax,(%ebx)
804af47:
                 43
                                              inc
                                                     %ebx
804af48:
                 0e
                                              push
                                                     %CS
                 10 86 04 41 0e 14
804af49:
                                                     %al,0x140e4104(%esi)
                                              adc
                 83 05 4e 0e 30 02 48
804af4f:
                                              addl
                                                     $0x48,0x2300e4e
804af56:
                 0e
                                              push
                                                     %CS
804af57:
                 14 41
                                                     $0x41,%al
                                              adc
804af59:
                 c3
                                              ret
804af5a:
                 0e
                                              push
                                                     %CS
804af5b:
                 10 41 c6
                                                     %al,-0x3a(%ecx)
                                              adc
804af5e:
                 ۵e
                                              push
                                                     %CS
                 0c 41
                                                     $0x41,%al
804af5f:
                                              or
804af61:
                 с7
                                              (bad)
804af62:
                 0e
                                              push
                                                     %CS
804af63:
                 08 41 c5
                                                     %al,-0x3b(%ecx)
                                              or
804af66:
                 0e
                                              push
                                                     %CS
804af67:
                 04 10
                                                     $0x10,%al
                                              add
```

```
804af69:
                 00 00
                                            add
                                                    %al,(%eax)
                 00 a4 04 00 00 50 f3
                                                    %ah,-0xcb00000(%esp,%eax,1)
 804af6h:
                                            bhs
 804af72:
                  ff
                                             (bad)
 804af73:
                 ff 02
                                             incl
                                                    %al,(%eax)
 804af75:
                 00 00
                                             add
                                                    %al,(%eax)
 804af77:
                 00 00
                                             add
 804af79:
                 00 00
                                             add
                                                    %al,(%eax)
0804af7c <__FRAME_END__>:
 804af7c:
                 00 00
                                             add
                                                    %al,(%eax)
Disassembly of section .init_array:
0804b000 <__frame_dummy_init_array_entry>:
 804h000:
                                            .byte 0x30
                 30
 804b001:
                 8b 04 08
                                            mov
                                                    (%eax,%ecx,1),%eax
Disassembly of section .fini_array:
0804b004 <__do_global_dtors_aux_fini_array_entry>:
 804b004:
                                            .byte 0x10
                 8b 04 08
 804b005:
                                            mov
                                                    (%eax,%ecx,1),%eax
Disassembly of section .jcr:
0804b008 <__JCR_END__>:
 804b008:
                 00 00
                                            add
                                                    %al,(%eax)
Disassembly of section .dynamic:
0804b00c <_DYNAMIC>:
                                                    %eax,(%eax)
%al,(%eax)
 804b00c:
                 01 00
                                            add
 804b00e:
                 00 00
                                            add
 804b010:
                 01 00
                                             add
                                                    %eax,(%eax)
 804b012:
                 00 00
                                            add
                                                    %al, (%eax)
                 0c 00
 804b014:
                                                    $0x0,%al
                                            or
                                                    %al,(%eax)
 804b016:
                 00 00
                                            add
                 c0 87 04 08 0d 00 00
                                                    $0x0,0xd0804(%edi)
 804b018:
                                            rolb
                                                    %al,%ah
 804b01f:
                 00 c4
                                            add
 804b021:
                 a2 04 08 19 00
                                                    %al,0x190804
                                            mov
                 00 00
                                                    %al,(%eax)
 804b026:
                                            add
                                                    %dh,0x1b0804(%eax)
 804b028:
                 00 b0 04 08 1b 00
                                             add
 804b02e:
                 00 00
                                                    %al, (%eax)
                                             add
 804b030:
                 04 00
                                                    $0x0,%al
                                            add
                                                    %al,(%eax)
 804b032:
                 00 00
                                             add
 804b034:
                  1a 00
                                             sbb
                                                    (%eax),%al
 804b036:
                 00 00
                                                    %al,(%eax)
                                            add
                 04 b0
 804h038:
                                             add
                                                    $0xb0,%al
                 04 08
 804b03a:
                                             add
                                                    $0x8,%al
 804b03c:
                 1c 00
                                                    $0x0,%al
                                             sbb
 804b03e:
                  00 00
                                             add
                                                    %al,(%eax)
                 04 00
 804b040:
                                            add
                                                    $0x0.%al
 804b042:
                  00 00
                                             add
                                                    %al,(%eax)
 804b044:
                  f5
                                             \mathsf{cmc}
 804b045:
                  fe
                                             (bad)
 804b046:
                  ff 6f ac
                                                    *-0x54(%edi)
                                             ljmp
 804b049:
                  81 04 08 05 00 00 00
                                             addl
                                                    $0x5,(%eax,%ecx,1)
 804b050:
                  8c 84 04 08 06 00 00
                                                    %es,0x608(%esp,%eax,1)
                                            mov
                                                    %bl,%ah
 804b057:
                 00 dc
                                             add
 804h059:
                 81 04 08 0a 00 00 00
                                                    $0xa,(%eax,%ecx,1)
                                            addl
 804b060:
                 5d
                                             pop
                                                    %ebp
 804b061:
                  01 00
                                                    %eax,(%eax)
                                             add
                                                    %cl,(%ebx)
 804b063:
                 00 0b
                                            add
                                                    %al,(%eax)
 804b065:
                 00 00
                                             add
 804b067:
                 00 10
                                             add
                                                    %dl,(%eax)
 804b069:
                 00 00
                                            add
                                                    %al,(%eax)
 804h06h:
                 00 15 00 00 00 00
                                             add
                                                    %dl,0x0
                 00 00
 804b071:
                                            add
                                                    %al,(%eax)
 804b073:
                 00 03
                                            add
                                                    %al, (%ebx)
                 00 00
 804b075:
                                            add
                                                    %al,(%eax)
 804b077:
                 00 f8
                                                    %bh,%al
                                            add
 804b079:
                 b0 04
                                             mov
                                                    $0x4,%al
 804b07b:
                 08 02
                                                    %al, (%edx)
                                             or
```

```
804b07d:
                  00 00
                                              add
                                                      %al,(%eax)
                  00 30
                                                      %dh,(%eax)
 804h07f:
                                              hhs
 804b081:
                  01 00
                                              add
                                                      %eax,(%eax)
 804b083:
                  00 14 00
                                                      %dl, (%eax, %eax, 1)
                                              add
                                                      %al,(%eax)
 804b086:
                  00 00
                                              add
                  11 00
                                                      %eax,(%eax)
 804b088:
                                              adc
 804b08a:
                  00 00
                                              add
                                                      %al,(%eax)
 804b08c:
                  17
                                              pop
                                                      %SS
                                                      %al,(%eax)
 804b08d:
                  00 00
                                              add
                                                      %dl,0x11080486(%eax)
                  00 90 86 04 08 11
 804b08f:
                                              add
 804b095:
                  00 00
                                              add
                                                      %al,(%eax)
                  00 70 86
 804b097:
                                              add
                                                      %dh,-0x7a(%eax)
                  04 08
 804h09a:
                                              add
                                                      $0x8,%al
 804b09c:
                  12 00
                                              adc
                                                      (%eax),%al
 804b09e:
                  00 00
                                                      %al,(%eax)
                                              add
 804b0a0:
                  20 00
                                              and
                                                      %al,(%eax)
                                                      %al,(%eax)
                  00 00
 804b0a2:
                                              add
                  13 00
 804b0a4:
                                              adc
                                                      (%eax),%eax
 804b0a6:
                  00 00
                                                      %al,(%eax)
                                              add
 804b0a8:
                  08 00
                                              or
                                                      %al, (%eax)
                                                      %al,(%eax)
                                              add
 804b0aa:
                  00 00
 804b0ac:
                  fe
                                              (bad)
 804b0ad:
                  ff
                                              (bad)
 804b0ae:
                  ff 6f 40
                                                      *0x40(%edi)
                                              ljmp
                  86 04 08
 804b0b1:
                                              xchg
                                                      %al,(%eax,%ecx,1)
 804b0b4:
                  ff
                                              (bad)
 804b0b5:
                  ff
                                              (bad)
                  ff 6f 01
                                                      *0x1(%edi)
 804b0b6:
                                              ljmp
 804b0b9:
                  00 00
                                              add
                                                      %al,(%eax)
 804b0bb:
                  00 f0
                                              add
                                                      %dh,%al
 804b0bd:
                  ff
                                              (bad)
                  ff 6f ea
 804b0be:
                                                      *-0x16(%edi)
                                              limp
 804b0c1:
                  85 04 08
                                              test
                                                      %eax,(%eax,%ecx,1)
Disassembly of section .got:
0804b0f4 <.got>:
804b0f4:
                                              add
                                                      %al,(%eax)
Disassembly of section .got.plt:
0804b0f8 <_GLOBAL_OFFSET_TABLE_>:
 804b0f8:
                  0c b0
                                              or
                                                      $0xb0,%al
 804b0fa:
                  04 08
                                              add
                                                      $0x8,%al
 804b104:
                  06
                                              push
                                                      %es
 804b105:
                  88 04 08
                                              \text{mov}
                                                      %al,(%eax,%ecx,1)
 804b108:
                  16
                                                      %SS
                                              push
                                                      %al,(%eax,%ecx,1)
 804b109:
                  88 04 08
                                              mov
                  26 88 04 08
 804b10c:
                                              mov
                                                      %al,%es:(%eax,%ecx,1)
 804b110:
                  36 88 04 08
                                                      %al,%ss:(%eax,%ecx,1)
                                              mov
 804b114:
                  46
                                              inc
                                                      %esi
                  88 04 08
                                                      %al,(%eax,%ecx,1)
 804b115:
                                              mov
 804b118:
                  56
                                              push
                                                      %esi
 804b119:
                  88 04 08
                                                      %al,(%eax,%ecx,1)
                                              mov
                                              data16 mov %al,(%eax,%ecx,1)
 804b11c:
                  66 88 04 08
                                                      804b0aa <_DYNAMIC+0x9e>
                  76 88
 804b120:
                                              jbe
 804b122:
                  04 08
                                              \operatorname{\mathsf{add}}\nolimits
                                                      $0x8,%al
 804b124:
                  86 88 04 08 96 88
                                                      %cl,-0x7769f7fc(%eax)
                                              xchg
 804b12a:
                  04 08
                                                      $0x8,%al
                                              add
                                                      %es:(%edi),%ds:(%esi)
 804b12c:
                  a6
                                              cmpsb
 804b12d:
                  88 04 08
                                              mov
                                                      %al,(%eax,%ecx,1)
                  b6 88
 804b130:
                                              mov
                                                      $0x88,%dh
                  04 08
 804b132:
                                                      $0x8,%al
                                              add
 804b134:
                  c6
                                              (bad)
 804b135:
                  88 04 08
                                                      %al,(%eax,%ecx,1)
                                              \text{mov}
 804b138:
                  d6
                                              (bad)
 804b139:
                  88 04 08
                                                      %al,(%eax,%ecx,1)
                                              mov
 804b13c:
                  e6 88
                                              out
                                                      %al,$0x88
 804b13e:
                  04 08
                                              add
                                                      $0x8,%al
 804b140:
                  f6
                                              (bad)
 804b141:
                  88 04 08
                                              mov
                                                      %al,(%eax,%ecx,1)
 804b144:
                  06
                                              push
                                                      %es
 804b145:
                  89 04 08
                                              mov
                                                      %eax,(%eax,%ecx,1)
```

```
804b148:
                 16
                                            push
                                                    %SS
                  89 04 08
 804h149:
                                                    %eax,(%eax,%ecx,1)
                                            mov
                 26 89 04 08
 804b14c:
                                            mov
                                                    %eax,%es:(%eax,%ecx,1)
 804b150:
                 36 89 04 08
                                                    %eax, %ss: (%eax, %ecx, 1)
                                            mov
 804b154:
                  46
                                                    %esi
                                             inc
                  89 04 08
 804b155:
                                            mov
                                                    %eax,(%eax,%ecx,1)
 804b158:
                  56
                                             push
                                                    %esi
 804b159:
                  89 04 08
                                                    %eax,(%eax,%ecx,1)
                                            mov
                 66 89 04 08
 804b15c:
                                                    %ax, (%eax, %ecx, 1)
                                            mov
                                                    804b0eb <_DYNAMIC+0xdf>
                  76 89
 804b160:
                                             jbe
 804b162:
                  04 08
                                             add
                                                    $0x8,%al
                 86 89 04 08 96 89
                                            xchg
                                                    %cl,-0x7669f7fc(%ecx)
 804b164:
                 04 08
 804b16a:
                                            add
                                                    $0x8,%al
                                                    %es:(%edi),%ds:(%esi)
 804b16c:
                 a6
                                             cmpsb
 804b16d:
                  89 04 08
                                                    %eax, (%eax, %ecx, 1)
                                            mov
 804b170:
                  b6 89
                                                    $0x89,%dh
                                            mov
                  04 08
                                                    $0x8,%al
 804b172:
                                            add
 804b174:
                  c6
                                             (bad)
 804b175:
                  89 04 08
                                            mov
                                                    %eax,(%eax,%ecx,1)
 804b178:
                 d6
                                             (bad)
                  89 04 08
 804b179:
                                                    %eax,(%eax,%ecx,1)
                                            mov
 804b17c:
                  e6 89
                                            out
                                                    %al,$0x89
 804b17e:
                  04 08
                                                    $0x8,%al
                                            add
 804b180:
                  f6
                                             (bad)
                 89 04 08
 804b181:
                                            mov
                                                    %eax,(%eax,%ecx,1)
 804b184:
                  06
                                             push
                                                    %es
 804b185:
                  8a 04 08
                                            mov
                                                    (%eax,%ecx,1),%al
 804b188:
                 16
                                                    %SS
                                            push
                  8a 04 08
 804b189:
                                            \text{mov}
                                                    (%eax,%ecx,1),%al
 804b18c:
                  26 8a 04 08
                                                    %es:(%eax,%ecx,1),%al
                                            mov
                  36 8a 04 08
 804b190:
                                            mov
                                                    %ss:(%eax,%ecx,1),%al
                  46
 804b194:
                                                    %esi
                                             inc
 804b195:
                  8a 04 08
                                            mov
                                                    (%eax,%ecx,1),%al
 804b198:
                  56
                                            push
                                                    %esi
 804b199:
                 8a 04 08
                                                    (%eax,%ecx,1),%al
                                            mov
Disassembly of section .data:
0804b19c <__data_start>:
804b19c:
                                            add
                 00 00
                                                    %al,(%eax)
0804b1a0 <__dso_handle>:
                                            add
                                                    %al,(%eax)
 804b1a0:
                 00 00
0804b1a4 <trans_char>:
 804b1a4:
                                                    %dh,(%ecx)
                 30 31
                                            xor
 804b1a6:
                  32 33
                                            xor
                                                    (%ebx),%dh
 804b1a8:
                 34 35
                                                    $0x35,%al
                                            xor
 804b1aa:
                 36 37
                                             ss aaa
                 38 39
 804b1ac:
                                             cmp
                                                    %bh, (%ecx)
 804b1ae:
                  41
                                             inc
                                                    %ecx
 804b1af:
                  42
                                             inc
                                                    %edx
                  43
                                                    %ebx
 804b1b0:
                                             inc
 804b1b1:
                  44
                                             inc
                                                    %esp
 804b1b2:
                  45
                                             inc
                                                    %ebp
 804b1b3:
                  46
                                             inc
                                                    %esi
0804b1b4 <level_counts>:
 804b1b4:
                                                    %eax,(%eax)
                 01 00
                                            add
 804b1b6:
                 00 00
                                                    %al,(%eax)
                                            add
 804b1b8:
                 01 00
                                            add
                                                    %eax,(%eax)
 804b1ba:
                 00 00
                                             add
                                                    %al,(%eax)
                 01 00
 804b1bc:
                                            add
                                                    %eax, (%eax)
                 00 00
                                                    %al,(%eax)
 804b1be:
                                            add
 804b1c0:
                 01 00
                                             add
                                                    %eax,(%eax)
 804b1c2:
                 00 00
                                            add
                                                    %al,(%eax)
 804b1c4:
                 05
                                             .byte 0x5
                 00 00
 804b1c5:
                                                    %al,(%eax)
                                            add
Disassembly of section .bss:
0804b200 <stderr@@GLIBC_2.0>:
 804b200:
                 00 00
                                            add
                                                    %al,(%eax)
```

. . .

```
0804b204 <stdin@@GLIBC_2.0>:
804b204: 00 00
                                        add
                                               %al,(%eax)
0804b208 coptarg@@GLIBC_2.0>:
804b208: 00 00
                                         add
                                               %al,(%eax)
0804b20c <completed.6279>:
804b20c:
              00 00
                                        add
                                               %al,(%eax)
0804b210 <userid>:
804b210: 00 00
                                        add
                                               %al,(%eax)
0804b214 <notify>:
                                               %al,(%eax)
804b214:
              00 00
                                        add
0804b218 <autograde>:
              00 00
804b218:
                                        add
                                               %al,(%eax)
0804b21c <infile>:
804b21c: 00 00
                                        add
                                               %al,(%eax)
0804b220 <cookie>:
804b220:
              00 00
                                        add
                                               %al,(%eax)
0804b224 <success>:
804b224:
              00 00
                                        add
                                               %al,(%eax)
0804b228 <global_value>:
804b228: 00 00
                                        add
                                               %al,(%eax)
0804b22c <gets_cnt>:
804b22c: 00 00
                                        add
                                               %al,(%eax)
0804b230 <global_nitro>:
804b230:
                00 00
                                        add
                                               %al,(%eax)
0804b234 <global_offset>:
804b234:
                                        add
                                               %al,(%eax)
               00 00
0804b238 <global_save_stack>:
0804b240 <host_table>:
       ...
0804c240 <stack_top>:
       . . .
0804c280 <gets_buf>:
Disassembly of section .comment:
00000000 <.comment>:
  0:
       47
                                inc
                                       %edi
       43
                                       %ebx
  1:
                                inc
  2:
        43
                                inc
                                       %ebx
       3a 20
                                       (%eax),%ah
  3:
                                cmp
  5:
9:
       28 44 65 62
                                       %al,0x62(%ebp,%eiz,2)
                                sub
       69 61 6e 20 34 2e 39
2e 32 2d 31 30 29 20
                               imul
                                       $0x392e3420,0x6e(%ecx),%esp
  10:
                                xor
                                       %cs:0x20293031,%ch
```

```
$0x2e,%al
%ebp,(%esi)
(%eax),%al
        34 2e
39 2e
32 00
17:
                                            xor
19:
                                            cmp
1b:
                                            xor
        47
1d:
                                            inc
                                                      %edi
        43
43
                                                      %ebx
1e:
                                            inc
1f:
                                                     %ebx
                                           inc
        43
3a 20
28 44 65 62
69 61 6e 20 34 2e 38
2e 34 2d
31 29
20 34 2e
38 2e
34 00
20:
22:
26:
2d:
30:
32:
35:
37:
```