In archive fpu.lib:

```
umqtoa.obj: file format pe-i386
```

```
00000000 < umqtoa@8>:
   0:
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 ec
                                   add
                                           esp,0xffffffec
   6:
        53
                                   push
                                           ebx
   7:
        56
                                   push
   8:
        57
                                   push
                                           edi
        8b 75 08
   9:
                                   mov
                                           esi, DWORD PTR [ebp+0x8]
   c:
        8b 7d 0c
                                   mov
                                           edi, DWORD PTR [ebp+0xc]
   f:
        8b 1e
                                   mov
                                           ebx,DWORD PTR [esi]
  11:
        8b 76 04
                                   mov
                                           esi, DWORD PTR [esi+0x4]
  14:
        83 c7 14
                                   add
                                           edi,0x14
  17:
        57
                                   push
                                           edi
        c6 07 00
  18:
                                   mov
                                           BYTE PTR [edi],0x0
  1b:
        c7 45 f8 cd cc cc cc
                                   mov
                                           DWORD PTR [ebp-0x8],0xccccccd
  22:
        c7 45 f4 cc cc cc cc
                                   mov
                                           DWORD PTR [ebp-0xc], 0xccccccc
        c7 45 fc 0a 00 00 00
  29:
                                   mov
                                           DWORD PTR [ebp-0x4],0xa
  30:
        0b f6
                                   or
                                           esi,esi
        74 50
  32:
                                   jе
                                           84 < umqtoa@8+0x84>
  34:
        33 c9
                                   xor
                                           ecx,ecx
  36:
        8b 45 f8
                                   mov
                                           eax, DWORD PTR [ebp-0x8]
  39:
        f7 e3
                                   mul
                                           ebx
  3b:
        89 55 f0
                                   mov
                                           DWORD PTR [ebp-0x10],edx
  3e:
        8b 45 f4
                                   mov
                                           eax, DWORD PTR [ebp-0xc]
  41:
        f7 e3
                                   mul
                                           ebx
  43:
        01 45 f0
                                   add
                                           DWORD PTR [ebp-0x10],eax
  46:
        83 d2 00
                                   adc
                                           edx,0x0
        89 55 ec
  49:
                                   mov
                                           DWORD PTR [ebp-0x14],edx
  4c:
        8b 45 f8
                                   mov
                                           eax, DWORD PTR [ebp-0x8]
        f7 e6
  4f:
                                   mul
                                           esi
  51:
        01 45 f0
                                   add
                                           DWORD PTR [ebp-0x10],eax
  54:
        11 55 ec
                                   adc
                                           DWORD PTR [ebp-0x14],edx
  57:
        83 d1 00
                                   adc
                                           ecx,0x0
  5a:
        8b 45 f4
                                   mov
                                           eax, DWORD PTR [ebp-0xc]
  5d:
        f7 e6
                                   mul
                                           esi
  5f:
        03 45 ec
                                   add
                                           eax, DWORD PTR [ebp-0x14]
  62:
        13 d1
                                   adc
                                           edx,ecx
  64:
        8b 4d f0
                                   mov
                                           ecx, DWORD PTR [ebp-0x10]
  67:
        Of ac c1 03
                                   shrd
                                           ecx,eax,0x3
  6b:
        Of ac d0 03
                                   shrd
                                           eax,edx,0x3
  6f:
        41
                                   inc
                                           ecx
  70:
        c1 ea 03
                                   shr
                                           edx,0x3
  73:
        8b d8
                                   mov
                                           ebx,eax
  75:
        8b f2
                                   mov
                                           esi,edx
  77:
        8b c1
                                   mov
                                           eax,ecx
  79:
                                           DWORD PTR [ebp-0x4]
        f7 65 fc
                                   mul
  7c:
        80 c2 30
                                   add
                                           dl,0x30
  7f:
        4f
                                   dec
                                           edi
  80:
        88 17
                                   mov
                                           BYTE PTR [edi],dl
                                           30 <_umqtoa@8+0x30>
  82:
        eb ac
                                   jmp
  84:
        8b c3
                                   mov
                                           eax,ebx
  86:
        f7 65 f8
                                   mul
                                           DWORD PTR [ebp-0x8]
  89:
        Of ac d0 03
                                   shrd
                                           eax, edx, 0x3
  8d:
        c1 ea 03
                                   shr
                                           edx,0x3
  90:
        40
                                   inc
                                           eax
  91:
        8b da
                                   mov
                                           ebx,edx
  93:
        f7 65 fc
                                   mul
                                           DWORD PTR [ebp-0x4]
  96:
        4f
                                   dec
                                           edi
  97:
        80 c2 30
                                   add
                                           dl,0x30
  9a:
        88 17
                                           BYTE PTR [edi],dl
                                   mov
  9c:
        85 db
                                   test
                                           ebx,ebx
  9e:
        75 e4
                                   jne
                                           84 < umqtoa@8+0x84>
  a0:
        59
                                   pop
                                           ecx
```

```
a1:
       8b c7
                                   mov
                                           eax,edi
a3:
       2b cf
                                   sub
                                           ecx,edi
a5:
       5f
                                   pop
                                           edi
a6:
       5e
                                   pop
                                           esi
a7:
       5b
                                   pop
                                           ebx
a8:
       c9
                                   leave
       c2 08 00
a9:
                                   ret
                                           0x8
```

umdtoa.obj: file format pe-i386

# Disassembly of section .text:

```
00000000 < umdtoa@8>:
   0:
         55
                                    push
                                            ebp
   1:
         8b ec
                                    mov
                                            ebp, esp
   3:
         53
                                    push
                                            ebx
   4:
         57
                                    push
                                            edi
   5:
         8b 7d 0c
                                    mov
                                            edi, DWORD PTR [ebp+0xc]
   8:
        8b 45 08
                                    mov
                                            eax, DWORD PTR [ebp+0x8]
        83 c7 0a
   b:
                                    add
                                            edi,0xa
   e:
         57
                                    push
                                            edi
                                            ecx, 0xccccccd
   f:
        b9 cd cc cc cc
                                    mov
  14:
        bb 0a 00 00 00
                                    mov
                                            ebx,0xa
         c6 07 00
  19:
                                    mov
                                            BYTE PTR [edi],0x0
  1c:
         f7 e1
                                    mul
                                            ecx
        0f ac d0 03
  1e:
                                    shrd
                                            eax, edx, 0x3
  22:
         c1 ea 03
                                    shr
                                            edx,0x3
  25:
         40
                                    inc
                                            eax
  26:
         52
                                    push
                                            edx
  27:
         f7 e3
                                    mul
                                            ebx
  29:
         4f
                                    dec
                                            edi
        80 c2 30
  2a:
                                    add
                                            dl,0x30
  2d:
         88 17
                                    mov
                                            BYTE PTR [edi],dl
  2f:
         58
                                    pop
                                            eax
  30:
         85 c0
                                    test
                                            eax,eax
  32:
         75 e8
                                    jne
                                            1c < umdtoa@8+0x1c>
  34:
         59
                                    pop
                                            ecx
  35:
         8b c7
                                    mov
                                            eax,edi
  37:
         2b cf
                                    sub
                                            ecx,edi
  39:
         5f
                                    pop
                                            edi
  3a:
         5b
                                    pop
                                            ebx
  3b:
         c9
                                    leave
  3c:
         c2 08 00
                                            0x8
```

smqtoa.obj: file format pe-i386

```
00000000 <_smqtoa@8>:
   0:
        55
                                  push
                                          ebp
   1:
                                          ebp,esp
        8b ec
                                  mov
   3:
        83 c4 ec
                                  add
                                          esp,0xffffffec
   6:
        53
                                  push
                                          ebx
   7:
        56
                                  push
                                          esi
                                  push
   8:
        57
                                          edi
   9:
        8b 75 08
                                  mov
                                          esi, DWORD PTR [ebp+0x8]
   c:
        8b 7d 0c
                                  mov
                                          edi,DWORD PTR [ebp+0xc]
                                          ebx,DWORD PTR [esi]
   f:
        8b 1e
                                  mov
  11:
        8b 76 04
                                  mov
                                          esi, DWORD PTR [esi+0x4]
  14:
        83 c7 15
                                  add
                                          edi,0x15
  17:
        57
                                  push
                                          edi
  18:
        c6 07 00
                                  mov
                                          BYTE PTR [edi],0x0
                                          DWORD PTR [ebp-0x8],0xccccccd
        c7 45 f8 cd cc cc cc
  1b:
                                  mov
        c7 45 f4 cc cc cc cc
                                          DWORD PTR [ebp-0xc],0xccccccc
  22:
                                  mov
  29:
        c7 45 fc 0a 00 00 00
                                  mov
                                          DWORD PTR [ebp-0x4],0xa
                                          esi,esi
  30:
        85 f6
                                  test
  32:
        56
                                  push
                                          esi
  33:
        79 0a
                                  jns
                                          3f < smqtoa@8+0x3f>
```

```
35:
      f7 d6
                                 not
                                         esi
37:
      f7 d3
                                 not
                                         ebx
39:
      83 c3 01
                                 add
                                         ebx,0x1
3c:
      83 d6 00
                                 adc
                                         esi,0x0
3f:
      0b f6
                                 or
                                         esi,esi
      74 50
41:
                                 jе
                                         93 < smqtoa@8+0x93>
43:
      33 c9
                                 xor
                                         ecx,ecx
45:
      8b 45 f8
                                 mov
                                         eax,DWORD PTR [ebp-0x8]
48:
      f7 e3
                                 mul
                                         ebx
4a:
      89 55 f0
                                 mov
                                         DWORD PTR [ebp-0x10],edx
4d:
      8b 45 f4
                                 mov
                                         eax,DWORD PTR [ebp-0xc]
50:
      f7 e3
                                 mul
52:
      01 45 f0
                                 add
                                         DWORD PTR [ebp-0x10],eax
55:
      83 d2 00
                                 adc
                                         edx,0x0
      89 55 ec
58:
                                 mov
                                         DWORD PTR [ebp-0x14],edx
5b:
      8b 45 f8
                                 mov
                                         eax, DWORD PTR [ebp-0x8]
5e:
      f7 e6
                                 mul
60:
      01 45 f0
                                 add
                                         DWORD PTR [ebp-0x10],eax
      11 55 ec
63:
                                 adc
                                         DWORD PTR [ebp-0x14],edx
66:
      83 d1 00
                                 adc
                                         ecx,0x0
                                         eax,DWORD PTR [ebp-0xc]
69:
      8b 45 f4
                                 mov
      f7 e6
6c:
                                 mul
6e:
      03 45 ec
                                 add
                                         eax, DWORD PTR [ebp-0x14]
71:
      13 d1
                                 adc
                                         edx,ecx
                                         ecx, DWORD PTR [ebp-0x10]
73:
      8b 4d f0
                                 mov
76:
      Of ac c1 03
                                 shrd
                                         ecx, eax, 0x3
7a:
      Of ac d0 03
                                 shrd
                                         eax, edx, 0x3
7e:
      41
                                 inc
                                         ecx
7f:
      c1 ea 03
                                 shr
                                         edx,0x3
82:
      8b d8
                                 mov
                                         ebx,eax
      8b f2
84:
                                 mov
                                         esi,edx
86:
      8b c1
                                 mov
                                         eax, ecx
                                         DWORD PTR [ebp-0x4]
88:
      f7 65 fc
                                 mul
8b:
      80 c2 30
                                 add
                                         dl,0x30
8e:
      4f
                                 dec
                                         edi
8f:
      88 17
                                 mov
                                         BYTE PTR [edi],dl
91:
      eb ac
                                 jmp
                                         3f < smqtoa@8+0x3f>
93:
      8b c3
                                 mov
                                         eax,ebx
95:
      f7 65 f8
                                 mul
                                         DWORD PTR [ebp-0x8]
98:
      Of ac d0 03
                                 shrd
                                         eax,edx,0x3
9c:
      c1 ea 03
                                 shr
                                         edx,0x3
9f:
      40
                                 inc
                                         eax
a0:
      8b da
                                 mov
                                         ebx,edx
a2:
      f7 65 fc
                                 mul
                                         DWORD PTR [ebp-0x4]
a5:
      4f
                                 dec
                                         edi
a6:
      80 c2 30
                                 add
                                         dl,0x30
a9:
      88 17
                                 mov
                                         BYTE PTR [edi],dl
ab:
      85 db
                                 test
                                         ebx,ebx
ad:
      75 e4
                                 jne
                                         93 <_smqtoa@8+0x93>
af:
      5e
                                 pop
                                         esi
b0:
      85 f6
                                 test
                                         esi,esi
b2:
      79 04
                                 jns
                                         b8 <_smqtoa@8+0xb8>
b4:
      4f
                                 dec
                                         edi
b5:
      c6 07 2d
                                 mov
                                         BYTE PTR [edi],0x2d
b8:
      59
                                 pop
                                         ecx
b9:
      8b c7
                                 mov
                                         eax,edi
bb:
      2b cf
                                 sub
                                         ecx,edi
bd:
      5f
                                 pop
                                         edi
be:
      5e
                                 pop
                                         esi
bf:
      5b
                                         ebx
                                 pop
c0:
      c9
                                 leave
c1:
                                         0x8
      c2 08 00
                                 ret
```

smdtoa.obj: file format pe-i386

Disassembly of section .text:

00000000 < smdtoa@8>:

0: 55 push ebp

```
1:
      8b ec
                                  mov
                                          ebp,esp
 3:
      53
                                  push
                                          ebx
 4:
      57
                                  push
                                          edi
 5:
      8b 7d 0c
                                  mov
                                          edi, DWORD PTR [ebp+0xc]
 8:
      8b 45 08
                                  mov
                                          eax,DWORD PTR [ebp+0x8]
 b:
      83 c7 0b
                                  add
                                          edi,0xb
 e:
      57
                                  push
                                          edi
 f:
      b9 cd cc cc cc
                                  mov
                                          ecx,0xccccccd
14:
      bb 0a 00 00 00
                                  mov
                                          ebx,0xa
19:
      c6 07 00
                                  mov
                                          BYTE PTR [edi],0x0
1c:
      85 c0
                                  test
                                          eax,eax
1e:
      79 02
                                  jns
                                          22 < smdtoa@8+0x22>
20:
      f7 d8
                                  neg
22:
      f7 e1
                                  mul
                                          ecx
24:
      Of ac d0 03
                                  shrd
                                          eax, edx, 0x3
28:
      c1 ea 03
                                  shr
                                          edx,0x3
2b:
      40
                                  inc
2c:
      52
                                  push
                                          edx
2d:
      f7 e3
                                  mul
                                          ebx
2f:
      4f
                                  dec
                                          edi
      80 c2 30
30:
                                  add
                                          dl,0x30
33:
      88 17
                                  mov
                                          BYTE PTR [edi],dl
35:
      58
                                  pop
36:
      85 c0
                                  test
                                          eax,eax
38:
      75 e8
                                  jne
                                          22 < smdtoa@8+0x22>
3a:
      8b 45 08
                                  mov
                                          eax, DWORD PTR [ebp+0x8]
3d:
      85 c0
                                  test
                                          eax, eax
3f:
      79 04
                                  jns
                                          45 < smdtoa@8+0x45>
41:
      4f
                                  dec
                                          edi
42:
      c6 07 2d
                                  mov
                                          BYTE PTR [edi],0x2d
45:
       59
                                  pop
                                          ecx
46:
      8b c7
                                  mov
                                          eax,edi
48:
      2b cf
                                  sub
                                          ecx,edi
4a:
       5f
                                  pop
                                          edi
4b:
      5b
                                  pop
                                          ebx
4c:
      c9
                                  leave
4d:
      c2 08 00
                                          0x8
```

FpuXexpY.obj: file format pe-i386

```
00000000 < FpuXexpY@16>:
   0:
        55
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
                                           esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 14 01 01 00 00
                                   test
                                           DWORD PTR [ebp+0\times14],0\times101
   d:
        74 0d
                                   jе
                                           1c <_FpuXexpY@16+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                           ax
  14:
                                   fwait
        9b
  15:
                                   sahf
        9e
  16:
        73 04
                                   jae
                                           1c < FpuXexpY@16+0x1c>
  18:
        7a 02
                                           1c < FpuXexpY@16+0x1c>
                                   jр
  1a:
        74 76
                                   jе
                                           92 < FpuXexpY@16+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
  20:
        f7 45 14 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x1
  27:
        74 0b
                                   jе
                                           34 < FpuXexpY@16+0x34>
  29:
        8d 45 94
                                   lea
                                           eax,[ebp-0x6c]
        db 68 1c
                                           TBYTE PTR [eax+0x1c]
  2c:
                                   fld
  2f:
        e9 80 00 00 00
                                   jmp
                                           b4 < FpuXexpY@16+0xb4>
  34:
        8b 45 08
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
        f7 45 14 10 00 00 00
  37:
                                   test
                                           DWORD PTR [ebp+0\times14],0\times10
  3e:
        75 58
                                   jne
                                           98 < FpuXexpY@16+0x98>
  40:
        f7 45 14 02 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x2
  47:
        74 04
                                   jе
                                           4d < FpuXexpY@16+0x4d>
  49:
        db 28
                                   fld
                                           TBYTE PTR [eax]
  4b:
        eb 67
                                   jmp
                                           b4 < FpuXexpY@16+0xb4>
  4d:
        f7 45 14 00 00 02 00
                                   test
                                           DWORD PTR [ebp+0x14],0x20000
```

```
5a < FpuXexpY@16+0x5a>
54:
       74 04
                                  jе
 56:
       dd 00
                                  fld
                                          QWORD PTR [eax]
 58:
       eb 5a
                                  jmp
                                          b4 < FpuXexpY@16+0xb4>
 5a:
       f7 45
              14 00 00 01 00
                                  test
                                          DWORD PTR [ebp+0x14],0x10000
61:
       74 04
                                          67 < FpuXexpY@16+0x67>
                                  jе
63:
       d9 00
                                  fld
                                          DWORD PTR [eax]
65:
       eb 4d
                                  jmp
                                          b4 < FpuXexpY@16+0xb4>
67:
       f7 45
              14 04 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x4
6e:
       74 04
                                  jе
                                          74 < FpuXexpY@16+0x74>
 70:
       db 00
                                  fild
                                          DWORD PTR [eax]
 72:
       eb 40
                                  jmp
                                          b4 < FpuXexpY@16+0xb4>
 74:
       f7 45
              14 00 00 00 01
                                  test
                                          DWORD PTR [ebp+0x14],0x1000000
 7b:
       74 04
                                  jе
                                          81 < FpuXexpY@16+0x81>
 7d:
       df 28
                                  fild
                                          QWORD PTR [eax]
 7f:
       eb 33
                                  jmp
                                          b4 < FpuXexpY@16+0xb4>
81:
       f7 45 14 08 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x8
88:
       74 05
                                  jе
                                          8f < FpuXexpY@16+0x8f>
8a:
       db 45 08
                                  fild
                                          DWORD PTR [ebp+0x8]
8d:
       eb 25
                                  jmp
                                          b4 < FpuXexpY@16+0xb4>
8f:
       dd 65 94
                                  frstor [ebp-0x6c]
92:
       33 c0
                                  xor
                                          eax,eax
94:
       c9
                                  leave
95:
       c2 10 00
                                  ret
                                          0x10
98:
       83 f8 01
                                  cmp
                                          eax,0x1
9b:
       75 04
                                  ine
                                          a1 < FpuXexpY@16+0xa1>
9d:
       d9 eb
                                  fldpi
9f:
       eb 13
                                  jmp
                                          b4 < FpuXexpY@16+0xb4>
a1:
       83 f8 02
                                  cmp
                                          eax,0x2
a4:
       75 e9
                                  jne
                                          8f < FpuXexpY@16+0x8f>
a6:
       d9 e8
                                  fld1
a8:
       d9 ea
                                  fldl2e
aa:
       d8 e1
                                  fsub
                                          st, st(1)
ac:
       d9 f0
                                  f2xm1
ae:
       d8 c1
                                  fadd
                                          st, st(1)
 b0:
       d9 fd
                                  fscale
 b2:
       dd d9
                                  fstp
                                          st(1)
                                  test
b4:
       f7 45
              14 00 01 00 00
                                          DWORD PTR [ebp+0x14],0x100
bb:
       74 0b
                                  jе
                                          c8 <_FpuXexpY@16+0xc8>
                                          eax,[ebp-0x6c]
bd:
       8d 45
              94
                                  lea
                                          TBYTE PTR [eax+0x1c]
 c0:
       db 68 1c
                                  fld
 c3:
       e9 80 00 00 00
                                  jmp
                                          148 < FpuXexpY@16+0x148>
 c8:
       8b 45 0c
                                  mov
                                          eax,DWORD PTR [ebp+0xc]
                                          DWORD PTR [ebp+0\times14],0\times1000
 cb:
       f7
          45
              14 00 10 00 00
                                  test
                                          128 <_FpuXexpY@16+0x128>
d2:
       75
          54
                                  jne
d4:
       f7 45 14 00 02 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times200
                                          e1 <_FpuXexpY@16+0xe1>
db:
       74 04
                                  jе
dd:
       db 28
                                  fld
                                          TBYTE PTR [eax]
df:
       eb 67
                                  jmp
                                          148 <_FpuXexpY@16+0x148>
e1:
       f7 45
              14 00 00 08 00
                                  test
                                          DWORD PTR [ebp+0x14],0x80000
       74 04
e8:
                                  jе
                                          ee <_FpuXexpY@16+0xee>
                                          QWORD PTR [eax]
       dd 00
                                  fld
ea:
ec:
       eb 5a
                                  jmp
                                          148 < FpuXexpY@16+0x148>
                                          DWORD PTR [ebp+0x14],0x40000
ee:
       f7 45
              14 00 00 04 00
                                  test
 f5:
       74 04
                                  jе
                                          fb < FpuXexpY@16+0xfb>
 f7:
       d9 00
                                  fld
                                          DWORD PTR [eax]
                                          148 <_FpuXexpY@16+0x148>
 f9:
       eb 4d
                                  jmp
                                          DWORD PTR [ebp+0x14],0x400
fb:
       f7 45
              14 00 04 00 00
                                  test
102:
       74 04
                                          108 < FpuXexpY@16+0x108>
                                  jе
                                          DWORD PTR [eax]
104:
       db 00
                                  fild
106:
       eb 40
                                  jmp
                                          148 < FpuXexpY@16+0x148>
108:
       f7 45
              14 00 00 00 02
                                  test
                                          DWORD PTR [ebp+0x14],0x2000000
10f:
       74 04
                                          115 < FpuXexpY@16+0x115>
                                  jе
                                          QWORD PTR [eax]
111:
       df
          28
                                  fild
113:
       eh 33
                                  jmp
                                          148 < FpuXexpY@16+0x148>
115:
       f7 45 14 00 08 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times800
11c:
       74 05
                                          123 < FpuXexpY@16+0x123>
                                  jе
                                          DWORD PTR [ebp+0xc]
11e:
       db 45 0c
                                  fild
121:
       eb 25
                                  jmp
                                          148 < FpuXexpY@16+0x148>
                                          8f < \overline{F}puXexpY@16+0x8f>
123:
       e9 67 ff ff ff
                                  jmp
128:
       83 f8 01
                                          eax,0x1
                                  cmp
```

```
75 04
12b:
                                  jne
                                          131 < FpuXexpY@16+0x131>
12d:
       d9 eb
                                  fldpi
12f:
       eb 17
                                  jmp
                                          148 < FpuXexpY@16+0x148>
131:
       83 f8 02
                                  cmp
                                          eax,0x2
134:
       0f 85 55 ff ff ff
                                  jne
                                          8f < FpuXexpY@16+0x8f>
13a:
       d9 e8
                                  fld1
13c:
       d9 ea
                                  fldl2e
13e:
       d8 e1
                                  fsub
                                          st, st(1)
140:
       d9 f0
                                  f2xm1
142:
       d8 c1
                                  fadd
                                          st, st(1)
144:
       d9 fd
                                  fscale
146:
       dd d9
                                  fstp
                                          st(1)
148:
       d9 c9
                                  fxch
                                          st(1)
14a:
       d9 f1
                                  fyl2x
14c:
       d9 c0
                                  fld
                                          st(0)
14e:
       d9 fc
                                  frndint
150:
       dc e9
                                  fsubr
                                          st(1), st
152:
       d9 c9
                                  fxch
                                          st(1)
154:
       d9 f0
                                  f2xm1
156:
       d9 e8
                                  fld1
158:
       de c1
                                  faddp
                                          st(1), st
15a:
       d9 fd
                                  fscale
15c:
       9b df e0
                                  fstsw
                                          ax
15f:
       9b
                                  fwait
160:
       d0 e8
                                  shr
                                          al,1
                                          8f < FpuXexpY@16+0x8f>
162:
       0f 82 27 ff ff ff
                                  jb
168:
       dd d9
                                  fstp
                                          st(1)
16a:
       f7 45 14 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x80
171:
       74 05
                                  jе
                                          178 < FpuXexpY@16+0x178>
                                          TBYTE PTR [ebp-0x76]
173:
       db 7d 8a
                                  fstp
176:
       eb 1f
                                  jmp
                                          197 < FpuXexpY@16+0x197>
178:
       8b 45
              10
                                  mov
                                          eax, DWORD PTR [ebp+0x10]
17b:
       f7 45 14 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x14],0x100000
182:
       74 04
                                  jе
                                          188 < FpuXexpY@16+0x188>
                                          DWORD PTR [eax]
184:
       d9 18
                                  fstp
186:
       eb 0f
                                  jmp
                                          197 < FpuXexpY@16+0x197>
188:
       f7 45
              14 00 00 20 00
                                  test
                                          DWORD PTR [ebp+0x14],0x200000
                                          195 < FpuXexpY@16+0x195>
18f:
       74 04
                                  jе
191:
       dd 18
                                  fstp
                                          QWORD PTR [eax]
193:
       eb 02
                                  jmp
                                          197 < FpuXexpY@16+0x197>
                                          TBYTE PTR [eax]
195:
       db 38
                                  fstp
197:
       dd 65 94
                                  frstor [ebp-0x6c]
19a:
       f7 45 14 01 01 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times101
1a1:
       74 02
                                  jе
                                          1a5 < FpuXexpY@16+0x1a5>
1a3:
       dd d8
                                  fstp
                                          st(0)
1a5:
       f7 45 14 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x80
lac:
       74 05
                                  jе
                                          1b3 < FpuXexpY@16+0x1b3>
lae:
       dd c7
                                  ffree
                                          st(7)
                                  fld
1b0:
       db 6d 8a
                                          TBYTE PTR [ebp-0x76]
       0c 01
                                          al,0x1
1b3:
                                  or
1b5:
       c9
                                  leave
       c2 10 00
1b6:
                                  ret
                                          0x10
```

FpuTrunc.obj: file format pe-i386

```
00000000 < FpuTrunc@12>:
   0:
        55
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
                                           esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                           1c < FpuTrunc@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                           1c < FpuTrunc@12+0x1c>
  18:
        7a 02
                                           1c < FpuTrunc@12+0x1c>
                                   jp
```

```
74 42
1a:
                                 jе
                                        5e < FpuTrunc@12+0x5e>
                                        [ebp-0x6c]
1c:
      9b dd 75 94
                                 fsave
20:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
27:
      74 08
                                 jе
                                        31 < FpuTrunc@12+0x31>
                                        eax, [ebp-0x6c]
29:
      8d 45 94
                                 lea
2c:
      db 68 1c
                                 fld
                                        TBYTE PTR [eax+0x1c]
2f:
      eb 33
                                 jmp
                                        64 < FpuTrunc@12+0x64>
31:
      8b 45 08
                                 mov
                                        eax, DWORD PTR [ebp+0x8]
34:
      f7 45 10 02 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x2
3b:
      74 04
                                 jе
                                        41 < FpuTrunc@12+0x41>
                                        TBYTE PTR [eax]
3d:
      db 28
                                 fld
3f:
      eb 23
                                 jmp
                                        64 < FpuTrunc@12+0x64>
41:
      f7 45 10 00 00 02 00
                                 test
                                        DWORD PTR [ebp+0x10],0x20000
48:
      74 04
                                 jе
                                        4e < FpuTrunc@12+0x4e>
                                        QWORD PTR [eax]
4a:
      dd 00
                                 fld
                                        64 < FpuTrunc@12+0x64>
4c:
      eb 16
                                 jmp
                                        DWORD PTR [ebp+0x10],0x10000
4e:
      f7 45
             10 00 00 01 00
                                 test
55:
      74 04
                                 jе
                                        5b < FpuTrunc@12+0x5b>
                                        DWORD PTR [eax]
57:
      d9 00
                                 fld
59:
      eb 09
                                 jmp
                                        64 < FpuTrunc@12+0x64>
5b:
      dd 65 94
                                 frstor [ebp-0x6c]
5e:
      33 c0
                                 xor
                                        eax, eax
60:
      c9
                                 leave
61:
      c2 0c 00
                                 ret
                                        0xc
64:
      50
                                 push
                                        eax
65:
      9b d9 3c 24
                                 fstcw
                                        WORD PTR [esp]
69:
      9b
                                 fwait
6a:
      66 8b 04 24
                                        ax, WORD PTR [esp]
6e:
      66 0d 00 0c
                                        ax,0xc00
72:
      50
                                 push
                                        eax
73:
      d9 2c 24
                                 fldcw
                                        WORD PTR [esp]
76:
      d9 fc
                                 frndint
78:
      58
                                 pop
                                        eax
79:
      d9 2c 24
                                 fldcw
                                        WORD PTR [esp]
7c:
      9b
                                 fwait
7d:
      58
                                 pop
                                        eax
7e:
      9b df e0
                                 fstsw
                                        ax
81:
      9h
                                 fwait
82:
      d0 e8
                                 shr
                                        al,1
84:
      72 d5
                                 jb
                                        5b < FpuTrunc@12+0x5b>
86:
      f7 45 10 80 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x80
8d:
      74 05
                                 jе
                                        94 < FpuTrunc@12+0x94>
8f:
      db 7d 8a
                                 fstp
                                        TBYTE PTR [ebp-0x76]
92:
      eb 39
                                 jmp
                                        cd < FpuTrunc@12+0xcd>
94:
      8b 45 0c
                                 mov
                                        eax,DWORD PTR [ebp+0xc]
97:
      f7 45
            10 40 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x40
9e:
      74 04
                                 jе
                                        a4 < FpuTrunc@12+0xa4>
a0:
      db 18
                                 fistp
                                        DWORD PTR [eax]
      eb 4b
a2:
                                 jmp
                                        ef <_FpuTrunc@12+0xef>
      f7 45 10 00 00 40 00
                                        DWORD PTR [ebp+0x10],0x400000
a4:
                                 test
      74 04
                                        b1 < FpuTrunc@12+0xb1>
ab:
                                 jе
         38
                                        QWORD PTR [eax]
ad:
      df
                                 fistp
                                        ef <_FpuTrunc@12+0xef>
af:
      eb 3e
                                 jmp
b1:
      f7 45 10 00 00 10 00
                                 test
                                        DWORD PTR [ebp+0x10],0x100000
b8:
      74 04
                                 jе
                                        be < FpuTrunc@12+0xbe>
ba:
      d9 18
                                 fstp
                                        DWORD PTR [eax]
bc:
      eb 0f
                                 jmp
                                        cd < FpuTrunc@12+0xcd>
be:
      f7 45 10 00 00 20 00
                                 test
                                        DWORD PTR [ebp+0x10],0x200000
c5:
      74 04
                                        cb < FpuTrunc@12+0xcb>
                                 jе
c7:
      dd 18
                                 fstp
                                        QWORD PTR [eax]
c9:
      eb 02
                                 jmp
                                        cd < FpuTrunc@12+0xcd>
ch:
      db 38
                                 fstp
                                        TBYTE PTR [eax]
cd:
      dd 65 94
                                 frstor [ebp-0x6c]
d0:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
d7:
                                        db <_FpuTrunc@12+0xdb>
      74 02
                                 1e
d9:
      dd d8
                                 fstp
                                        st(0)
db:
      f7 45 10 80 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x80
      74 05
                                        e9 < FpuTrunc@12+0xe9>
e2:
                                 jе
                                        st(7)
e4:
      dd c7
                                 ffree
e6:
      db 6d 8a
                                 fld
                                        TBYTE PTR [ebp-0x76]
```

```
e9:
      0c 01
                                  or
                                         al,0x1
eb:
      c9
                                  leave
ec:
      c2 0c 00
                                  ret
                                         0xc
ef:
      9b df e0
                                  fstsw
                                         ax
f2:
      9h
                                  fwait
f3:
      d0 e8
                                  shr
                                         al,1
f5:
      0f 82 60 ff ff ff
                                  jЬ
                                         5b < FpuTrunc@12+0x5b>
fb:
      eb d0
                                  jmp
                                         cd < FpuTrunc@12+0xcd>
```

FpuTexpX.obj: file format pe-i386

```
00000000 < FpuTexpX@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp, esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuTexpX@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuTexpX@12+0x1c>
  18:
        7a 02
                                   jр
                                          1c < FpuTexpX@12+0x1c>
  1a:
        74 76
                                   jе
                                          92 < FpuTexpX@12+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 0b
                                   jе
                                          34 < FpuTexpX@12+0x34>
                                          eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        e9 80 00 00 00
                                   jmp
                                          b4 < FpuTexpX@12+0xb4>
  34:
        8b 45 08
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
  37:
        f7 45 10 10 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10
  3e:
        75
           58
                                   jne
                                          98 < FpuTexpX@12+0x98>
  40:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  47:
        74 04
                                   jе
                                          4d <_FpuTexpX@12+0x4d>
  49:
        db 28
                                   fld
                                          TBYTE PTR [eax]
  4b:
        eb 67
                                   jmp
                                          b4 < FpuTexpX@12+0xb4>
  4d:
        f7 45
               10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  54:
        74 04
                                   jе
                                          5a < FpuTexpX@12+0x5a>
  56:
        dd 00
                                   fld
                                          QWORD PTR [eax]
                                          b4 < FpuTexpX@12+0xb4>
  58:
        eb 5a
                                   jmp
  5a:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  61:
        74 04
                                   jе
                                          67 <_FpuTexpX@12+0x67>
        d9 00
  63:
                                   fld
                                          DWORD PTR [eax]
                                          b4 < FpuTexpX@12+0xb4>
  65:
        eb 4d
                                   jmp
  67:
        f7 45 10 04 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x4
        74 04
                                          74 <_FpuTexpX@12+0x74>
  6e:
                                   jе
  70:
        db 00
                                          DWORD PTR [eax]
                                   fild
  72:
        eb 40
                                   jmp
                                          b4 <_FpuTexpX@12+0xb4>
  74:
        f7 45 10 00 00 00 01
                                          DWORD PTR [ebp+0x10],0x1000000
                                   test
  7b:
        74 04
                                   jе
                                          81 < FpuTexpX@12+0x81>
  7d:
        df
           28
                                   fild
                                          QWORD PTR [eax]
  7f:
        eb 33
                                   jmp
                                          b4 < FpuTexpX@12+0xb4>
  81:
        f7 45 10 08 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x8
  88:
        74 05
                                          8f < FpuTexpX@12+0x8f>
                                   jе
  8a:
        db 45 08
                                   fild
                                          DWORD PTR [ebp+0x8]
  8d:
        eb 25
                                   jmp
                                          b4 < FpuTexpX@12+0xb4>
  8f:
        dd 65 94
                                   frstor [ebp-0x6c]
  92:
        33 c0
                                   xor
                                          eax, eax
        c9
  94:
                                   leave
  95:
        c2 0c 00
                                   ret
                                          0xc
  98:
        83 f8 01
                                   cmp
                                          eax,0x1
  9b:
        74 04
                                   jе
                                          a1 < FpuTexpX@12+0xa1>
        d9 eb
  9d:
                                   fldpi
  9f:
        eh 13
                                          b4 < FpuTexpX@12+0xb4>
                                   jmp
  a1:
        83 f8 02
                                          eax,0x2
                                   cmp
  a4:
        74 e9
                                          8f < FpuTexpX@12+0x8f>
                                   jе
```

```
fld1
a6:
       d9 e8
a8:
       d9 ea
                                  fldl2e
aa:
       d8 e1
                                  fsub
                                          st, st(1)
ac:
       d9 f0
                                  f2xm1
 ae:
       d8 c1
                                  fadd
                                          st, st(1)
b0:
       d9 fd
                                  fscale
b2:
       dd d9
                                  fstp
                                          st(1)
b4:
       d9 e9
                                  fldl2t
b6:
       de c9
                                  fmulp
                                          st(1),st
b8:
       d9 c0
                                  fld
                                          st(0)
ba:
       d9 fc
                                  frndint
bc:
       dc e9
                                  fsubr
                                          st(1),st
be:
       d9 c9
                                  fxch
                                          st(1)
 c0:
       d9 f0
                                  f2xm1
 c2:
       d9 e8
                                  fld1
 c4:
       de c1
                                  faddp
                                          st(1),st
 c6:
       d9 fd
                                  fscale
 c8:
       9b df e0
                                  fstsw
                                         ax
 cb:
       9b
                                  fwait
 cc:
       d0 e8
                                  shr
                                          al,1
 ce:
       72 bf
                                  jЬ
                                          8f < FpuTexpX@12+0x8f>
d0:
       dd d9
                                  fstp
                                          st(1)
d2:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
d9:
       74 05
                                  jе
                                          e0 < FpuTexpX@12+0xe0>
       db 7d 8a
                                          TBYTE PTR [ebp-0x76]
db:
                                  fstp
de:
       eb 1f
                                  jmp
                                          ff < FpuTexpX@12+0xff>
e0:
       8b 45 0c
                                  mov
                                          eax, DWORD PTR [ebp+0xc]
e3:
       f7 45 10 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x10],0x100000
 ea:
       74 04
                                  jе
                                          f0 < FpuTexpX@12+0xf0>
 ec:
       d9 18
                                  fstp
                                          DWORD PTR [eax]
 ee:
       eb 0f
                                  jmp
                                          ff < FpuTexpX@12+0xff>
 f0:
       f7 45 10 00 00 20 00
                                  test
                                          DWORD PTR [ebp+0x10],0x200000
 f7:
       74 04
                                  jе
                                          fd < FpuTexpX@12+0xfd>
 f9:
       dd 18
                                  fstp
                                          QWORD PTR [eax]
 fb:
       eb 02
                                  jmp
                                          ff <_FpuTexpX@12+0xff>
                                          TBYTE PTR [eax]
 fd:
       db 38
                                  fstp
 ff:
       dd 65 94
                                  frstor [ebp-0x6c]
102:
       f7 45 10 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1
109:
       74 02
                                  jе
                                          10d < FpuTexpX@12+0x10d>
10b:
       dd d8
                                  fstp
                                          st(0)
10d:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
114:
       74 05
                                  jе
                                          11b < FpuTexpX@12+0x11b>
116:
       dd c7
                                  ffree
                                          st(7)
118:
       db 6d 8a
                                  fld
                                          TBYTE PTR [ebp-0x76]
       0c 01
11b:
                                  or
                                          al,0x1
11d:
       c9
                                  leave
11e:
       c2 0c 00
                                          0xc
```

FpuTanh.obj: file format pe-i386

```
00000000 <_FpuTanh@12>:
   0:
        55
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
                                          esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuTanh@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
                                          1c <_FpuTanh@12+0x1c>
  16:
        73 04
                                   jae
        7a 02
  18:
                                          1c < FpuTanh@12+0x1c>
                                   jp
  1a:
        74 6a
                                          86 < FpuTanh@12+0x86>
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45
              10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                          31 < FpuTanh@12+0x31>
                                   jе
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
```

```
2c:
                                          TBYTE PTR [eax+0x1c]
       db 68 1c
                                  fld
 2f:
       eb 5b
                                  jmp
                                          8c < FpuTanh@12+0x8c>
 31:
       8b 45 08
                                  mov
                                          eax, DWORD PTR [ebp+0x8]
 34:
       f7 45 10 02 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x2
 3b:
       74 04
                                          41 < FpuTanh@12+0x41>
                                  jе
 3d:
       db 28
                                  fld
                                          TBYTE PTR [eax]
 3f:
       eb 4b
                                  jmp
                                          8c < FpuTanh@12+0x8c>
 41:
       f7 45
              10 00 00 02 00
                                  test
                                          DWORD PTR [ebp+0x10],0x20000
 48:
       74 04
                                          4e < FpuTanh@12+0x4e>
                                  jе
 4a:
       dd 00
                                  fld
                                          QWORD PTR [eax]
 4c:
       eb 3e
                                  jmp
                                          8c < FpuTanh@12+0x8c>
 4e:
       f7 45
              10 00 00 01 00
                                  test
                                          DWORD PTR [ebp+0x10],0x10000
 55:
       74 04
                                  jе
                                          5b < FpuTanh@12+0x5b>
 57:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 59:
       eb 31
                                  jmp
                                          8c < FpuTanh@12+0x8c>
                                          DWORD PTR [ebp+0x10],0x4
 5b:
       f7 45
              10 04 00 00 00
                                  test
 62:
       74 04
                                  jе
                                          68 < FpuTanh@12+0x68>
 64:
       db 00
                                  fild
                                          DWORD PTR [eax]
 66:
       eb 24
                                  jmp
                                          8c < FpuTanh@12+0x8c>
                                          DWORD PTR [ebp+0x10],0x1000000
 68:
       f7 45
              10 00 00 00 01
                                  test
 6f:
       74 04
                                  jе
                                          75 < FpuTanh@12+0x75>
 71:
       df 28
                                  fild
                                          QWORD PTR [eax]
 73:
       eb 17
                                  jmp
                                          8c < FpuTanh@12+0x8c>
 75:
       f7 45 10 08 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x8
 7c:
       74 05
                                  jе
                                          83 < FpuTanh@12+0x83>
 7e:
       db 45 08
                                  fild
                                          DWORD PTR [ebp+0x8]
 81:
       eb 09
                                  jmp
                                          8c < FpuTanh@12+0x8c>
 83:
       dd 65 94
                                  frstor [ebp-0x6c]
 86:
       33 c0
                                  xor
                                          eax, eax
 88:
       c9
                                  leave
 89:
       c2 0c 00
                                  ret
                                          0xc
       d9 c0
 8c:
                                  fld
                                          st(0)
 8e:
       68 81 00 00 00
                                  push
                                          0x81
 93:
       6a 00
                                  push
                                          0 \times 0
 95:
       6a 00
                                  push
                                          0 \times 0
 97:
       e8 00 00 00 00
                                  call
                                          9c < FpuTanh@12+0x9c>
 9c:
       0b c0
                                  or
                                          eax, eax
       74 e3
 9e:
                                  jе
                                          83 < FpuTanh@12+0x83>
       d9 c9
 a0:
                                  fxch
                                          st(1)
 a2:
       68 81
              00 00 00
                                  push
                                          0x81
 a7:
       6a 00
                                  push
                                          0 \times 0
       6a 00
 a9:
                                  push
                                          0 \times 0
 ab:
       e8 00 00 00 00
                                  call
                                          b0 < FpuTanh@12+0xb0>
 b0:
       0b c0
                                  or
                                          eax, eax
 b2:
       74 cf
                                          83 <_FpuTanh@12+0x83>
                                  ie
 b4:
       de f9
                                  fdivrp st(1), st
                                          DWORD PTR [ebp+0x10],0x80
 b6:
       f7 45 10 80 00 00 00
                                  test
 bd:
       74 05
                                  ie
                                          c4 < FpuTanh@12+0xc4>
 bf:
       db 7d 8a
                                  fstp
                                          TBYTE PTR [ebp-0x76]
                                          e3 < FpuTanh@12+0xe3>
 c2:
       eb 1f
                                  jmp
       8b 45 0c
                                          eax, DWORD PTR [ebp+0xc]
 c4:
                                  mov
       f7 45
              10 00 00 10 00
 c7:
                                  test
                                          DWORD PTR [ebp+0x10],0x100000
 ce:
       74 04
                                  jе
                                          d4 < FpuTanh@12+0xd4>
 d0:
       d9 18
                                  fstp
                                          DWORD PTR [eax]
 d2:
       eb 0f
                                  jmp
                                          e3 < FpuTanh@12+0xe3>
 d4:
       f7 45
              10 00 00 20 00
                                  test
                                          DWORD PTR [ebp+0x10],0x200000
                                          e1 <_FpuTanh@12+0xe1>
 db:
       74 04
                                  jе
 dd:
       dd 18
                                  fstp
                                          QWORD PTR [eax]
 df:
       eb 02
                                  jmp
                                          e3 < FpuTanh@12+0xe3>
 e1:
       db 38
                                  fstp
                                          TBYTE PTR [eax]
                                  frstor [ebp-0x6c]
 e3:
       dd 65 94
 e6:
       f7 45 10 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1
                                          f1 <_FpuTanh@12+0xf1>
 ed:
       74 02
                                  jе
                                  fstp
 ef:
       dd d8
                                          st(0)
                                          DWORD PTR [ebp+0\times10],0\times80
 f1:
       f7 45 10 80 00 00 00
                                  test
 f8:
       74 05
                                          ff < FpuTanh@12+0xff>
                                  1e
                                  ffree
 fa:
       dd c7
                                          st(7)
 fc:
       db 6d 8a
                                  fld
                                          TBYTE PTR [ebp-0x76]
 ff:
       0c 01
                                          al,0x1
                                  or
101:
       c9
                                  leave
```

102: c2 0c 00 ret 0xc

```
Disassembly of section .drectve:
```

00000000 <.drectve>:

92:

f7 45 10 20 00 00 00

```
0:
        2d 64 65 66 61
                                   sub
                                          eax,0x61666564
   5:
        75 6c
                                   jne
                                          73 <.drectve+0x73>
   7:
        74 6c
                                   jе
                                          75 <.drectve+0x75>
        69 62 3a 46 70 75 2e
   9:
                                   imul
                                          esp,DWORD PTR [edx+0x3a],0x2e757046
  10:
        6c
                                   ins
                                          BYTE PTR es:[edi],dx
  11:
        69
                                   .byte 0x69
  12:
        62 20
                                   bound
                                          esp,QWORD PTR [eax]
FpuTan.obj:
                 file format pe-i386
Disassembly of section .text:
00000000 < FpuTan@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp, esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuTan@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuTan@12+0x1c>
  18:
        7a 02
                                   jр
                                          1c < FpuTan@12+0x1c>
  1a:
        74 6a
                                   jе
                                          86 < FpuTan@12+0x86>
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
                                          DWORD PTR [ebp+0\times10],0\times1
  20:
        f7 45 10 01 00 00 00
                                   test
  27:
        74 08
                                   jе
                                          31 < FpuTan@12+0x31>
                                          eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        eb 5b
                                   jmp
                                          8c < FpuTan@12+0x8c>
  31:
        8b 45 08
                                   mov
                                          eax,DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                          41 <_FpuTan@12+0x41>
  3d:
        db 28
                                   fld
                                          TBYTE PTR [eax]
        eb 4b
  3f:
                                   jmp
                                          8c <_FpuTan@12+0x8c>
  41:
        f7 45 10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                          4e < FpuTan@12+0x4e>
  4a:
        dd 00
                                   fld
                                          QWORD PTR [eax]
                                          8c < FpuTan@12+0x8c>
  4c:
        eb 3e
                                   jmp
  4e:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
                                          5b <_FpuTan@12+0x5b>
  55:
        74 04
                                   jе
  57:
        d9 00
                                   fld
                                          DWORD PTR [eax]
                                          8c < FpuTan@12+0x8c>
  59:
        eb 31
                                   jmp
  5b:
        f7 45 10 04 00 00 00
                                          DWORD PTR [ebp+0x10],0x4
                                   test
  62:
        74 04
                                          68 <_FpuTan@12+0x68>
                                   jе
  64:
        db 00
                                   fild
                                          DWORD PTR [eax]
  66:
        eb 24
                                   jmp
                                          8c < FpuTan@12+0x8c>
  68:
        f7 45 10 00 00 00 01
                                   test
                                          DWORD PTR [ebp+0x10],0x1000000
  6f:
        74 04
                                          75 < FpuTan@12+0x75>
                                   iе
  71:
        df
           28
                                   fild
                                          QWORD PTR [eax]
  73:
        eb 17
                                   jmp
                                          8c < FpuTan@12+0x8c>
  75:
        f7 45 10 08 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x8
                                          83 <_FpuTan@12+0x83>
  7c:
        74 05
                                   jе
  7e:
        db 45 08
                                   fild
                                          DWORD PTR [ebp+0x8]
  81:
        eb 09
                                   jmp
                                          8c < FpuTan@12+0x8c>
  83:
        dd 65 94
                                   frstor [ebp-0x6c]
  86:
        33 c0
                                   xor
                                          eax, eax
        c9
  88:
                                   leave
  89:
        c2 0c 00
                                   ret
                                          0xc
        d9 eb
  8c:
                                   fldpi
  8e:
        d8 c0
                                   fadd
                                          st, st(0)
  90:
        d9 c9
                                   fxch
                                          st(1)
```

test

DWORD PTR [ebp+0x10],0x20

```
99:
       75 0c
                                  jne
                                          a7 < FpuTan@12+0xa7>
9b:
       d8 c9
                                  fmul
                                          st, st(1)
9d:
       68 68 01 00 00
                                  push
                                          0x168
a2:
       de 34 24
                                  fidiv
                                         WORD PTR [esp]
a5:
       9h
                                  fwait
a6:
       58
                                  pop
                                          eax
a7:
       d9 f8
                                  fprem
a9:
       d9 f2
                                  fptan
ab:
       9b df e0
                                  fstsw
                                          ax
ae:
       9b
                                  fwait
 af:
       d0 e8
                                  shr
                                          al,1
b1:
       72 d0
                                  jЬ
                                          83 < FpuTan@12+0x83>
b3:
       9e
                                  sahf
b4:
       7a f1
                                  jр
                                          a7 < FpuTan@12+0xa7>
b6:
       dd d8
                                  fstp
                                          st(0)
b8:
       dd d9
                                  fstp
                                          st(1)
ba:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
 c1:
       74 05
                                  jе
                                          c8 < FpuTan@12+0xc8>
                                          TBYTE PTR [ebp-0x76]
 c3:
       db 7d 8a
                                  fstp
 c6:
       eb 1f
                                  jmp
                                          e7 < FpuTan@12+0xe7>
                                          eax, DWORD PTR [ebp+0xc]
 c8:
       8b 45 0c
                                  mov
 cb:
       f7 45 10 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x10],0x100000
d2:
       74 04
                                  jе
                                          d8 < FpuTan@12+0xd8>
d4:
       d9 18
                                  fstp
                                          DWORD PTR [eax]
d6:
       eb 0f
                                  jmp
                                          e7 < FpuTan@12+0xe7>
d8:
       f7 45 10 00 00 20 00
                                  test
                                          DWORD PTR [ebp+0x10],0x200000
df:
       74 04
                                  jе
                                          e5 < FpuTan@12+0xe5>
e1:
       dd 18
                                  fstp
                                          QWORD PTR [eax]
e3:
       eb 02
                                  jmp
                                          e7 <_FpuTan@12+0xe7>
                                          TBYTE PTR [eax]
e5:
       db 38
                                  fstp
e7:
       dd 65 94
                                  frstor [ebp-0x6c]
 ea:
       f7 45 10 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1
 f1:
       74 02
                                  jе
                                          f5 < FpuTan@12+0xf5>
 f3:
       dd d8
                                  fstp
                                          st(0)
 f5:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
 fc:
       74 05
                                  jе
                                          103 < FpuTan@12+0x103>
 fe:
       dd c7
                                  ffree
                                          st(7)
100:
       db 6d 8a
                                  fld
                                          TBYTE PTR [ebp-0x76]
       0c 01
103:
                                  or
                                          al,0x1
105:
       c9
                                  leave
106:
       c2 0c 00
                                          0xc
```

FpuSub.obj: file format pe-i386

```
00000000 < FpuSub@16>:
   0:
        55
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
                                           esp,0xffffff88
        83 c4 88
                                   add
        f7 45 14 01 01 00 00
                                   test
   6:
                                           DWORD PTR [ebp+0\times14],0\times101
   d:
        74 0d
                                   jе
                                           1c < FpuSub@16+0x1c>
   f:
        d9 e5
                                   fxam
        9b df e0
  11:
                                   fstsw
                                           ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                           1c < FpuSub@16+0x1c>
  18:
        7a 02
                                           1c < FpuSub@16+0x1c>
                                   jр
  1a:
        74 76
                                           92 < FpuSub@16+0x92>
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
  20:
        f7 45 14 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x1
  27:
        74 0b
                                           34 < FpuSub@16+0x34>
                                   jе
  29:
        8d 45 94
                                   lea
                                           eax,[ebp-0x6c]
        db 68 1c
  2c:
                                   fld
                                           TBYTE PTR [eax+0x1c]
  2f:
        e9 80 00 00 00
                                   jmp
                                           b4 < FpuSub@16+0xb4>
        8b 45 08
  34:
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
        f7 45 14 10 00 00 00
  37:
                                   test
                                           DWORD PTR [ebp+0x14],0x10
           58
        75
                                           98 < FpuSub@16+0x98>
  3e:
                                   jne
        f7 45 14 02 00 00 00
  40:
                                   test
                                           DWORD PTR [ebp+0x14],0x2
```

```
47:
       74 04
                                  jе
                                          4d < FpuSub@16+0x4d>
 49:
       db 28
                                  fld
                                          TBYTE PTR [eax]
 4b:
       eb 67
                                  jmp
                                          b4 < FpuSub@16+0xb4>
 4d:
       f7 45 14 00 00 02 00
                                  test
                                          DWORD PTR [ebp+0x14],0x20000
 54:
       74 04
                                          5a < FpuSub@16+0x5a>
                                  jе
                                          QWORD PTR [eax]
 56:
       dd 00
                                  fld
 58:
       eb 5a
                                  jmp
                                          b4 < FpuSub@16+0xb4>
 5a:
       f7 45
              14 00 00 01 00
                                  test
                                          DWORD PTR [ebp+0x14],0x10000
 61:
       74 04
                                          67 < FpuSub@16+0x67>
                                  jе
 63:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 65:
       eb 4d
                                  jmp
                                          b4 < FpuSub@16+0xb4>
 67:
       f7 45
              14 04 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x4
 6e:
       74 04
                                  jе
                                          74 < FpuSub@16+0x74>
 70:
       db 00
                                  fild
                                          DWORD PTR [eax]
 72:
       eb 40
                                  jmp
                                          b4 < FpuSub@16+0xb4>
                                          DWORD PTR [ebp+0x14],0x1000000
 74:
       f7 45
              14 00 00 00 01
                                  test
 7b:
       74 04
                                  jе
                                          81 < FpuSub@16+0x81>
 7d:
       df
          28
                                  fild
                                          QWORD PTR [eax]
 7f:
       eb 33
                                  jmp
                                          b4 < FpuSub@16+0xb4>
 81:
       f7 45 14 08 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x8
 88:
       74 05
                                  jе
                                          8f < FpuSub@16+0x8f>
 8a:
       db 45 08
                                  fild
                                          DWORD PTR [ebp+0x8]
 8d:
       eb 25
                                  jmp
                                          b4 < FpuSub@16+0xb4>
 8f:
       dd 65 94
                                  frstor [ebp-0x6c]
 92:
       33 c0
                                  xor
                                          eax, eax
 94:
       c9
                                  leave
 95:
       c2 10 00
                                  ret
                                          0x10
 98:
       83 f8 01
                                  cmp
                                          eax,0x1
 9b:
       75 04
                                  jne
                                          a1 < FpuSub@16+0xa1>
 9d:
       d9 eb
                                  fldpi
 9f:
       eb 13
                                  jmp
                                          b4 < FpuSub@16+0xb4>
 a1:
       83 f8 02
                                  cmp
                                          eax,0x2
 a4:
       75 e9
                                  jne
                                          8f < FpuSub@16+0x8f>
 a6:
       d9 e8
                                  fld1
 a8:
       d9 ea
                                  fldl2e
 aa:
       d8 e1
                                  fsub
                                          st, st(1)
 ac:
       d9 f0
                                  f2xm1
 ae:
       d8 c1
                                  fadd
                                          st, st(1)
 b0:
       d9 fd
                                  fscale
 b2:
       dd d9
                                  fstp
                                          st(1)
 b4:
       f7 45
              14 00 01 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times100
                                          c8 <_FpuSub@16+0xc8>
 bb:
       74 0b
                                  jе
 bd:
       8d 45
                                  lea
                                          eax,[ebp-0x6c]
 c0:
       db 68 1c
                                  fld
                                          TBYTE PTR [eax+0x1c]
 c3:
       e9 80 00 00 00
                                  jmp
                                          148 < FpuSub@16+0x148>
 c8:
       8b 45 0c
                                  mov
                                          eax,DWORD PTR [ebp+0xc]
 cb:
       f7
          45
              14 00 10 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times1000
                                          128 <_FpuSub@16+0x128>
 d2:
       75
          54
                                  jne
 d4:
       f7 45 14 00 02 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times200
       74 04
 db:
                                  ie
                                          e1 <_FpuSub@16+0xe1>
                                          TBYTE PTR [eax]
       db 28
 dd:
                                  fld
 df:
       eb 67
                                  jmp
                                          148 <_FpuSub@16+0x148>
       f7 45
                                          DWORD PTR [ebp+0x14],0x80000
 e1:
              14 00 00 08 00
                                  test
 e8:
       74 04
                                  jе
                                          ee < FpuSub@16+0xee>
 ea:
       dd 00
                                  fld
                                          QWORD PTR [eax]
 ec:
       eb 5a
                                  jmp
                                          148 < FpuSub@16+0x148>
                                          DWORD PTR [ebp+0x14],0x40000
 ee:
       f7 45
              14 00 00 04 00
                                  test
 f5:
       74 04
                                          fb < FpuSub@16+0xfb>
                                  jе
 f7:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 f9:
       eb 4d
                                  jmp
                                          148 < FpuSub@16+0x148>
                                          DWORD PTR [ebp+0x14],0x400
 fb:
       f7 45
              14 00 04 00 00
                                  test
102:
       74 04
                                          108 < FpuSub@16+0x108>
                                  jе
                                          DWORD PTR [eax]
104:
       db 00
                                  fild
106:
       eb 40
                                  jmp
                                          148 < FpuSub@16+0x148>
                                          DWORD PTR [ebp+0x14],0x2000000
108:
       f7 45
              14 00 00 00 02
                                  test
10f:
       74 04
                                  jе
                                          115 < FpuSub@16+0x115>
                                          QWORD PTR [eax]
111:
       df
          28
                                  fild
113:
       eh 33
                                          148 < FpuSub@16+0x148>
                                  jmp
115:
       f7 45 14 00 08 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times800
11c:
       74 05
                                          123 < FpuSub@16+0x123>
                                  jе
```

```
11e:
       db 45 0c
                                  fild
                                          DWORD PTR [ebp+0xc]
121:
       eb 25
                                  jmp
                                          148 < FpuSub@16+0x148>
                                          8f < \overline{FpuSub@16+0x8f} >
123:
       e9 67 ff ff ff
                                  jmp
128:
       83 f8 01
                                  cmp
                                          eax,0x1
12b:
       75 04
                                  jne
                                          131 < FpuSub@16+0x131>
12d:
       d9 eb
                                  fldpi
12f:
       eb 17
                                  jmp
                                          148 < FpuSub@16+0x148>
131:
       83 f8 02
                                  cmp
                                          eax,0x2
134:
       0f 85 55 ff ff ff
                                  jne
                                          8f < FpuSub@16+0x8f>
13a:
       d9 e8
                                  fld1
13c:
       d9 ea
                                  fldl2e
13e:
       d8 e1
                                  fsub
                                          st, st(1)
140:
       d9 f0
                                  f2xm1
142:
       d8 c1
                                  fadd
                                          st, st(1)
144:
       d9 fd
                                  fscale
146:
       dd d9
                                  fstp
                                          st(1)
148:
       de e9
                                  fsubrp st(1),st
14a:
       9b df e0
                                  fstsw
14d:
       9b
                                  fwait
14e:
       d1 e8
                                  shr
                                          eax,1
       0f 82 39 ff ff ff
                                          8f < FpuSub@16+0x8f>
150:
                                  jЬ
       f7 45 14 80 00 00 00
156:
                                  test
                                          DWORD PTR [ebp+0x14],0x80
15d:
       74 05
                                  jе
                                          164 < FpuSub@16+0x164>
                                          TBYTE PTR [ebp-0x76]
15f:
       db 7d 8a
                                  fstp
162:
       eb 1f
                                  jmp
                                          183 < FpuSub@16+0x183>
164:
       8b 45 10
                                  mov
                                          eax, DWORD PTR [ebp+0x10]
167:
       f7 45 14 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x14],0x100000
16e:
       74 04
                                  jе
                                          174 < FpuSub@16+0x174>
                                          DWORD PTR [eax]
170:
       d9 18
                                  fstp
172:
       eb 0f
                                  jmp
                                          183 < FpuSub@16+0x183>
                                          DWORD PTR [ebp+0x14],0x200000
174:
       f7 45 14 00 00 20 00
                                  test
17b:
       74 04
                                  jе
                                          181 < FpuSub@16+0x181>
                                          QWORD PTR [eax]
17d:
       dd 18
                                  fstp
17f:
       eb 02
                                  jmp
                                          183 < FpuSub@16+0x183>
                                          TBYTE PTR [eax]
181:
       db 38
                                  fstp
183:
       dd 65 94
                                  frstor [ebp-0x6c]
186:
       f7 45 14 01 01 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times101
18d:
       74 02
                                  jе
                                          191 < FpuSub@16+0x191>
18f:
       dd d8
                                  fstp
                                          st(0)
191:
       f7 45 14 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x80
198:
       74 05
                                  jе
                                          19f < FpuSub@16+0x19f>
19a:
       dd c7
                                  ffree
                                          st(7)
19c:
       db 6d 8a
                                  fld
                                          TBYTE PTR [ebp-0x76]
                                          al,0x1
19f:
       0c 01
                                  or
1a1:
       c9
                                  leave
1a2:
       c2 10 00
                                  ret
                                          0x10
```

FpuState.obj: file format pe-i386

```
00000000 < FpuState@8>:
   0:
        55
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 90
                                   add
                                           esp,0xffffff90
   6:
        9c
                                   pushf
   7:
        60
                                   pusha
   8:
        9b dd 75 94
                                    fsave
                                           [ebp-0x6c]
   c:
        9b
                                   fwait
   d:
        8d 75 94
                                   lea
                                           esi,[ebp-0x6c]
                                           edi,DWORD PTR [ebp+0x8]
  10:
        8b 7d 08
                                   mov
                                           eax,0x20204449
  13:
        b8 49 44 20 20
                                   mov
  18:
        ah
                                   stos
                                           DWORD PTR es:[edi],eax
  19:
        8b 45 0c
                                   mov
                                           eax,DWORD PTR [ebp+0xc]
  1c:
        33 c9
                                           ecx,ecx
                                   xor
  1e:
        51
                                   push
                                           ecx
  1f:
        b1 0a
                                           cl,0xa
                                   mov
  21:
        33 d2
                                   xor
                                           edx,edx
  23:
         f7 f1
                                   div
                                           ecx
```

```
25:
      80 c2 30
                                 add
                                         dl,0x30
28:
      52
                                 push
                                         edx
29:
      0b c0
                                 or
                                         eax, eax
      75 f4
2b:
                                 jne
                                         21 < FpuState@8+0x21>
2d:
      58
                                 pop
2e:
      0b c0
                                 or
                                         eax,eax
30:
      74 03
                                 jе
                                         35 < FpuState@8+0x35>
                                         BYTE PTR es:[edi],al
32:
                                 stos
33:
      eb f8
                                 jmp
                                         2d < FpuState@8+0x2d>
35:
      66 b8 0d 0a
                                 mov
                                         ax,0xa0d
39:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
      b8 43 57 20 20
3b:
                                 mov
                                         eax,0x20205743
40:
      ab
                                 stos
                                         DWORD PTR es:[edi],eax
41:
      ad
                                 lods
                                         eax, DWORD PTR ds:[esi]
42:
      c1 e0 10
                                 shl
                                         eax,0x10
      b9 04 00 00 00
45:
                                 mov
                                         ecx,0x4
      b0 00
4a:
                                 mov
                                         al,0x0
4c:
      d1 c0
                                 rol
                                         eax,1
4e:
      b4 20
                                 mov
                                         ah,0x20
50:
      04 30
                                 add
                                         al,0x30
52:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
54:
      49
                                 dec
                                         ecx
55:
      75 f3
                                 jne
                                         4a < FpuState@8+0x4a>
57:
      66 33 c0
                                 xor
                                         ax,ax
5a:
      c1 c0 02
                                 rol
                                         eax,0x2
5d:
      66 d1 c8
                                 ror
                                         ax,1
60:
      d0 c4
                                 rol
                                         ah,1
62:
      66 05 30 30
                                 add
                                         ax,0x3030
66:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
68:
      b0 20
                                 mov
                                         al,0x20
6a:
      aa
                                 stos
                                         BYTE PTR es:[edi],al
6b:
      66 33 c0
                                 xor
                                         ax,ax
6e:
      c1 c0 02
                                 rol
                                         eax,0x2
71:
      66 d1 c8
                                 ror
                                         ax,1
74:
      d0 c4
                                 rol
                                         ah,1
76:
      66 05 30 30
                                 add
                                         ax,0x3030
7a:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
7c:
      66 b8 20 20
                                 mov
                                         ax,0x2020
80:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
82:
      b9 08 00 00 00
                                 mov
                                         ecx,0x8
87:
      b0 00
                                 mov
                                         al,0x0
89:
      d1 c0
                                 rol
                                         eax,1
8b:
      b4 20
                                 mov
                                         ah,0x20
8d:
      04 30
                                 add
                                         al,0x30
8f:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
91:
      49
                                 dec
                                         ecx
92:
      75 f3
                                 jne
                                         87 < FpuState@8+0x87>
94:
      4f
                                 dec
                                         edi
95:
      66 b8 0d 0a
                                 mov
                                         ax,0xa0d
99:
                                         WORD PTR es:[edi],ax
      66 ab
                                 stos
9b:
      b8 53 57 20 20
                                 mov
                                         eax,0x20205753
a0:
      ab
                                 stos
                                         DWORD PTR es:[edi],eax
                                         eax, DWORD PTR ds:[esi]
a1:
      ad
                                 lods
a2:
      c1 e0 10
                                 shl
                                         eax,0x10
a5:
      b9 02 00 00 00
                                 mov
                                         ecx,0x2
aa:
      b0 00
                                 mov
                                         al,0x0
ac:
      d1 c0
                                 rol
                                         eax,1
ae:
      b4 20
                                 mov
                                         ah,0x20
b0:
      04 30
                                 add
                                         al,0x30
b2:
      66 ab
                                 stos
                                         WORD PTR es:[edi],ax
b4:
      49
                                 dec
                                         ecx
b5:
      75 f3
                                 jne
                                         aa < FpuState@8+0xaa>
b7:
      66 33 c0
                                 xor
                                         ax,ax
      c1 c0 03
ba:
                                 rol
                                         eax,0x3
bd:
      88 45 90
                                 mov
                                         BYTE PTR [ebp-0x70],al
c0:
      50
                                 push
                                         eax
c1:
      83 e0 07
                                 and
                                         eax,0x7
c4:
      66 d1 c8
                                         ax,1
                                 ror
c7:
      d1 c0
                                         eax,1
                                 rol
c9:
      66 c1 c8 02
                                         ax,0x2
                                 ror
```

```
cd:
        d0 c4
                                    rol
                                           ah,1
  cf:
        05 30 30 30 20
                                   add
                                           eax,0x20303030
  d4:
        ab
                                   stos
                                           DWORD PTR es:[edi],eax
  d5:
        58
                                   pop
  d6:
        b9 03 00 00 00
                                   mov
                                           ecx,0x3
  db:
        b0 00
                                   mov
                                           al,0x0
  dd:
        d1 c0
                                   rol
                                           eax,1
  df:
        b4 20
                                   mov
                                           ah,0x20
  e1:
        04 30
                                   add
                                           al,0x30
  e3:
        66 ab
                                   stos
                                           WORD PTR es:[edi],ax
  e5:
        49
                                   dec
                                           ecx
  e6:
        75 f3
                                   jne
                                           db < FpuState@8+0xdb>
  e8:
        b0 20
                                   mov
                                           al,0x20
  ea:
                                   stos
                                           BYTE PTR es:[edi],al
        b0 00
  eb:
                                   mov
                                           al,0x0
  ed:
        d1 c0
                                   rol
                                           eax,1
  ef:
        04 30
                                   add
                                           al,0x30
  f1:
        b4 20
                                   mov
                                           ah,0x20
  f3:
        66 ab
                                   stos
                                           WORD PTR es:[edi],ax
  f5:
        b9 07
               00 00 00
                                   mov
                                           ecx,0x7
  fa:
        eb 08
                                   jmp
                                           104 <szflags+0x8>
000000fc <szflags>:
  fc:
        20 49 44
                                   and
                                           BYTE PTR [ecx+0x44],cl
  ff:
        5a
                                   pop
                                           edx
 100:
        4f
                                   dec
                                           edi
 101:
        55
                                   push
                                           ebp
 102:
         50
                                   push
                                           eax
 103:
         53
                                   push
                                           ebx
 104:
        b0 00
                                   mov
                                           al,0x0
 106:
        d1 c0
                                   rol
                                           eax,1
 108:
        b4 20
                                   mov
                                           ah,0x20
 10a:
        3c 01
                                   cmp
                                           al,0x1
 10c:
        75 08
                                   jne
                                           116 <szflags+0x1a>
 10e:
        8a 81 00 00 00 00
                                   mov
                                           al, BYTE PTR [ecx+0x0]
 114:
        eb 08
                                   jmp
                                           11e <szflags+0x22>
 116:
        8a 81 00 00 00 00
                                   mov
                                           al, BYTE PTR [ecx+0x0]
 11c:
        0c 20
                                   or
                                           al,0x20
 11e:
        66 ab
                                   stos
                                           WORD PTR es:[edi],ax
 120:
         49
                                   dec
                                           ecx
                                           104 <szflags+0x8>
 121:
        75 e1
                                   jne
 123:
        4f
                                   dec
                                           edi
 124:
        66 b8 0d 0a
                                   mov
                                           ax,0xa0d
 128:
        66 ab
                                   stos
                                           WORD PTR es:[edi],ax
 12a:
        b8 54 57 20 20
                                   mov
                                           eax,0x20205754
 12f:
        ab
                                   stos
                                           DWORD PTR es:[edi],eax
                                           eax, DWORD PTR ds:[esi]
 130:
        ad
                                   lods
                                           cl,BYTE PTR [ebp-0x70]
 131:
        8a 4d 90
                                   mov
 134:
        d0 e1
                                   shl
                                           cl,1
        66 d3 c8
 136:
                                   ror
                                           ax,cl
 139:
        c1 e0 10
                                   shl
                                           eax,0x10
        b9 08 00 00 00
 13c:
                                   mov
                                           ecx,0x8
                                           al,0x0
        b0 00
 141:
                                   mov
 143:
        c1 c8 02
                                    ror
                                           eax,0x2
 146:
        66 c1 c0 02
                                    rol
                                           ax,0x2
 14a:
        50
                                   push
                                           eax
 14b:
        0a c0
                                   or
                                           al,al
 14d:
        75 07
                                   jne
                                           156 <szflags+0x5a>
 14f:
        b8 56 41 4c 20
                                   mov
                                           eax,0x204c4156
 154:
        eb 1b
                                    jmp
                                           171 <szflags+0x75>
 156:
        3c 01
                                   cmp
                                           al,0x1
                                           161 <szflags+0x65>
 158:
        75 07
                                    jne
 15a:
        b8 4e 55 4c 20
                                   mov
                                           eax,0x204c554e
        eb 10
 15f:
                                    jmp
                                           171 <szflags+0x75>
 161:
        3c 02
                                           al,0x2
                                   cmp
 163:
        75 07
                                           16c <szflags+0x70>
                                    jne
 165:
        b8 4e 61 4e 20
                                           eax,0x204e614e
                                   mov
        eb 05
 16a:
                                           171 <szflags+0x75>
                                   jmp
 16c:
        b8 46 52 45 20
                                           eax,0x20455246
                                   mov
 171:
                                           DWORD PTR es:[edi],eax
        ab
                                   stos
```

```
58
172:
                                  pop
                                          eax
173:
       49
                                  dec
                                          ecx
174:
       75 cb
                                  jne
                                          141 <szflags+0x45>
176:
       4f
                                  dec
                                          edi
177:
       66 b8 0d 0a
                                  mov
                                          ax,0xa0d
17b:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
17d:
       b8 49 50 20 20
                                  mov
                                          eax,0x20205049
182:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
183:
       ad
                                  lods
                                          eax,DWORD PTR ds:[esi]
184:
       b9 08 00 00 00
                                  mov
                                          ecx,0x8
189:
       c1 c0 04
                                  rol
                                          eax,0x4
18c:
       50
                                  push
                                          eax
18d:
       24 0f
                                  and
                                          al,0xf
18f:
       04 30
                                  add
                                          al,0x30
       3c 39
191:
                                  cmp
                                          al,0x39
193:
       76 02
                                  jbe
                                          197 <szflags+0x9b>
195:
       04 07
                                  add
                                          al,0x7
197:
       aa
                                  stos
                                          BYTE PTR es:[edi],al
198:
       58
                                  pop
199:
       49
                                  dec
                                          ecx
19a:
       75 ed
                                  jne
                                          189 <szflags+0x8d>
19c:
       66 b8 0d 0a
                                  mov
                                          ax,0xa0d
1a0:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
1a2:
       b8 43 53 20 20
                                  mov
                                          eax,0x20205343
1a7:
                                  stos
                                          DWORD PTR es:[edi],eax
1a8:
       ad
                                  lods
                                          eax, DWORD PTR ds:[esi]
1a9:
       c1 e0 10
                                  shl
                                          eax,0x10
lac:
       b9 04 00 00 00
                                  mov
                                          ecx,0x4
1b1:
       c1 c0 04
                                  rol
                                          eax,0x4
1b4:
       50
                                  push
                                          eax
1b5:
       24 0f
                                  and
                                          al,0xf
1b7:
       04 30
                                  add
                                          al,0x30
1b9:
       3c 39
                                  cmp
                                          al,0x39
1bb:
       76 02
                                  jbe
                                          1bf <szflags+0xc3>
1bd:
       04 07
                                  add
                                          al,0x7
1bf:
       aa
                                  stos
                                          BYTE PTR es:[edi],al
1c0:
       58
                                  pop
                                          eax
1c1:
       49
                                  dec
                                          ecx
1c2:
       75 ed
                                  jne
                                          1b1 <szflags+0xb5>
1c4:
       66 b8 0d 0a
                                  mov
                                          ax,0xa0d
                                          WORD PTR es:[edi],ax
1c8:
       66 ab
                                  stos
1ca:
       b8 4f 41 20 20
                                  mov
                                          eax,0x2020414f
1cf:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
1d0:
       ad
                                  lods
                                          eax, DWORD PTR ds:[esi]
1d1:
       b9 08 00 00 00
                                  mov
                                          ecx,0x8
1d6:
       c1 c0 04
                                  rol
                                          eax,0x4
1d9:
       50
                                  push
                                          eax
1da:
       24 0f
                                  and
                                          al,0xf
1dc:
       04 30
                                  add
                                          al,0x30
       3c 39
1de:
                                  cmp
                                          al,0x39
1e0:
       76 02
                                  jbe
                                          1e4 <szflags+0xe8>
1e2:
       04 07
                                  add
                                          al,0x7
1e4:
       aa
                                  stos
                                          BYTE PTR es:[edi],al
1e5:
       58
                                  pop
                                          eax
1e6:
       49
                                  dec
                                          ecx
1e7:
       75 ed
                                          1d6 <szflags+0xda>
                                  jne
1e9:
       66 b8 0d 0a
                                  mov
                                          ax,0xa0d
1ed:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
1ef:
       b8 44 53 20 20
                                  mov
                                          eax,0x20205344
1f4:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
1f5:
       ad
                                  lods
                                          eax, DWORD PTR ds:[esi]
1f6:
       c1 e0 10
                                  shl
                                          eax,0x10
1f9:
       b9 04 00 00 00
                                  mov
                                          ecx,0x4
       c1 c0 04
                                          eax,0x4
1fe:
                                  rol
201:
       50
                                  push
                                          eax
                                          al,0xf
202:
       24 0f
                                  and
204:
       04 30
                                  add
                                          al,0x30
206:
       3c 39
                                          al,0x39
                                  cmp
208:
       76 02
                                  jbe
                                          20c <szflags+0x110>
20a:
       04 07
                                  add
                                          al,0x7
```

```
20c:
       aa
                                  stos
                                          BYTE PTR es:[edi],al
20d:
       58
                                  pop
20e:
       49
                                  dec
                                          ecx
20f:
       75 ed
                                  jne
                                          1fe <szflags+0x102>
211:
       66 b8 0d 0a
                                  mov
                                          ax,0xa0d
215:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
217:
       33 c9
                                  xor
                                          ecx,ecx
219:
       66 b8 0d 0a
                                  mov
                                          ax,0xa0d
21d:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
21f:
       51
                                  push
                                          ecx
220:
       b8 53 54 30 20
                                  mov
                                          eax,0x20305453
225:
       c1 e1 10
                                  shl
                                          ecx,0x10
228:
       03 c1
                                  add
                                          eax,ecx
22a:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
       c1 e9 10
22b:
                                  shr
                                          ecx,0x10
       02 4d 90
22e:
                                  add
                                          cl,BYTE PTR [ebp-0x70]
231:
       80 e1 07
                                  and
                                          cl,0x7
234:
       d0 e1
                                  shl
                                          cl,1
236:
       8d 45 9c
                                  lea
                                          eax, [ebp-0x64]
239:
       66 8b 00
                                  mov
                                          ax, WORD PTR [eax]
23c:
       d3 e8
                                  shr
                                          eax,cl
23e:
       24 03
                                  and
                                          al,0x3
240:
       3c 03
                                  cmp
                                          al,0x3
242:
       75 0e
                                  jne
                                          252 <szflags+0x156>
244:
       b8 20 45 4d 50
                                  mov
                                          eax,0x504d4520
249:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
       66 b8 54 59
24a:
                                  mov
                                          ax,0x5954
24e:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
250:
       eb 79
                                  jmp
                                          2cb <szflags+0x1cf>
252:
       3c 01
                                  cmp
                                          al,0x1
254:
       75 1d
                                  jne
                                          273 <szflags+0x177>
256:
       6a 02
                                  push
                                          0x2
258:
       56
                                  push
                                          esi
       e8 00 00 00 00
259:
                                  call
                                          25e <szflags+0x162>
25e:
       b2 2b
                                  mov
                                          dl,0x2b
260:
       a9 04 00 00 00
                                  test
                                          eax,0x4
265:
       74 02
                                  jе
                                          269 <szflags+0x16d>
267:
       b2 2d
                                  mov
                                          dl,0x2d
                                          eax,0x20302020
269:
       b8 20 20 30 20
                                  mov
26e:
       8a e2
                                  mov
                                          ah,dl
                                          DWORD PTR es:[edi],eax
270:
       ab
                                  stos
271:
       eb 58
                                  jmp
                                          2cb <szflags+0x1cf>
273:
       0a c0
                                  or
                                          al,al
275:
       75 13
                                  jne
                                          28a <szflags+0x18e>
277:
       68 02 88 00 00
                                  push
                                          0x8802
27c:
       57
                                  push
                                          edi
27d:
       6a 0f
                                  push
                                          0xf
27f:
       56
                                  push
                                          esi
280:
       e8 00 00 00 00
                                  call
                                          285 <szflags+0x189>
       83 c7 18
285:
                                  add
                                          edi,0x18
       eb 41
288:
                                  jmp
                                          2cb <szflags+0x1cf>
       6a 02
28a:
                                  push
                                          0x2
28c:
       56
                                  push
                                          esi
28d:
       e8 00 00 00 00
                                  call
                                          292 <szflags+0x196>
292:
       a9 01 00 00 00
                                  test
                                          eax,0x1
297:
       75 14
                                  jne
                                          2ad <szflags+0x1b1>
299:
       b8 20 49 4e 44
                                  mov
                                          eax,0x444e4920
29e:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
29f:
       b8 45 46 49 4e
                                  mov
                                          eax,0x4e494645
2a4:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
2a5:
       b8 49 54 45 20
                                  mov
                                          eax,0x20455449
2aa:
       ah
                                  stos
                                          DWORD PTR es:[edi],eax
2ah:
       eb 1e
                                  jmp
                                          2cb <szflags+0x1cf>
2ad:
       66 ba 20 2b
                                          dx,0x2b20
                                  mov
2b1:
       a9 04 00 00 00
                                  test
                                          eax,0x4
2b6:
       74 02
                                          2ba <szflags+0x1be>
                                  jе
2b8:
       b6 2d
                                          dh,0x2d
                                  mov
       66 8b c2
2ba:
                                  mov
                                          ax,dx
2bd:
       66 ab
                                          WORD PTR es:[edi],ax
                                  stos
2bf:
       b8 49 4e 46 49
                                          eax,0x49464e49
                                  mov
```

```
2c4:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
                                          eax,0x5954494e
2c5:
       b8 4e 49 54 59
                                  mov
2ca:
       ab
                                   stos
                                          DWORD PTR es:[edi],eax
2cb:
       83 c6 0a
                                   add
                                          esi,0xa
2ce:
       59
                                   pop
                                          ecx
2cf:
       41
                                   inc
                                          ecx
2d0:
       80 f9 08
                                   cmp
                                          cl,0x8
2d3:
       0f 82 40 ff ff ff
                                   jb
                                          219 <szflags+0x11d>
2d9:
       c6 07 00
                                  mov
                                          BYTE PTR [edi],0x0
2dc:
       dd 65 94
                                   frstor [ebp-0x6c]
2df:
       9b
                                   fwait
2e0:
       61
                                   popa
2e1:
       9d
                                   popf
2e2:
       c9
                                   leave
       c2 08 00
2e3:
                                   ret
                                          0x8
```

## Disassembly of section .drectve:

```
00000000 <.drectve>:
   0:
        2d 64 65 66 61
                                  sub
                                          eax,0x61666564
   5:
        75 6c
                                   jne
                                          73 <.drectve+0x73>
   7:
        74 6c
                                  jе
                                          75 <.drectve+0x75>
   9:
        69 62 3a 46 70 75 2e
                                  imul
                                          esp, DWORD PTR [edx+0x3a], 0x2e757046
  10:
        6c
                                  ins
                                          BYTE PTR es:[edi],dx
  11:
        69
                                   .byte 0x69
        62 20
  12:
                                  bound
                                         esp,QWORD PTR [eax]
```

FpuSqrt.obj: file format pe-i386

```
00000000 < FpuSqrt@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuSqrt@12+0x1c>
        d9 e5
   f:
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9h
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuSqrt@12+0x1c>
        7a 02
                                          1c <_FpuSqrt@12+0x1c>
  18:
                                   jр
  1a:
        74 76
                                   jе
                                          92 <_FpuSqrt@12+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0\times10],0\times1
                                          34 <_FpuSqrt@12+0x34>
        74 0b
  27:
                                   jе
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
        db 68 1c
                                          TBYTE PTR [eax+0x1c]
  2c:
                                   fld
                                          b4 <_FpuSqrt@12+0xb4>
        e9 80 00 00 00
  2f:
                                   jmp
  34:
        8b 45 08
                                          eax, DWORD PTR [ebp+0x8]
                                   mov
  37:
        f7 45 10 10 00 00 00
                                   test
                                          DWORD PTR [ebp+0\times10],0\times10
  3e:
        75 58
                                   jne
                                          98 < FpuSqrt@12+0x98>
  40:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  47:
        74 04
                                   jе
                                          4d < FpuSqrt@12+0x4d>
                                          TBYTE PTR [eax]
  49:
        db 28
                                   fld
  4b:
        eb 67
                                   jmp
                                          b4 < FpuSqrt@12+0xb4>
  4d:
        f7 45 10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  54:
        74 04
                                          5a < FpuSqrt@12+0x5a>
                                   jе
                                          QWORD PTR [eax]
  56:
        dd 00
                                   fld
  58:
        eb 5a
                                   jmp
                                          b4 < FpuSqrt@12+0xb4>
  5a:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  61:
        74 04
                                          67 < FpuSqrt@12+0x67>
                                   jе
                                          DWORD PTR [eax]
  63:
        d9 00
                                   fld
  65:
        eb 4d
                                   jmp
                                          b4 < FpuSqrt@12+0xb4>
  67:
        f7 45 10 04 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x4
  6e:
        74 04
                                          74 < FpuSqrt@12+0x74>
                                   jе
                                          DWORD PTR [eax]
  70:
        db 00
                                   fild
        eb 40
  72:
                                          b4 < FpuSqrt@12+0xb4>
                                   jmp
```

```
74:
       f7 45 10 00 00 00 01
                                  test
                                          DWORD PTR [ebp+0x10],0x1000000
 7b:
       74 04
                                  jе
                                          81 < FpuSqrt@12+0x81>
       df 28
 7d:
                                  fild
                                          QWORD PTR [eax]
 7f:
       eb 33
                                  jmp
                                          b4 < FpuSqrt@12+0xb4>
 81:
       f7 45 10 08 00 00 00
                                  test
                                          DWORD PTR [ebp+0\times10],0\times8
 88:
       74 05
                                  jе
                                          8f < FpuSqrt@12+0x8f>
                                          DWORD PTR [ebp+0x8]
 8a:
       db 45 08
                                  fild
 8d:
       eb 25
                                  jmp
                                          b4 < FpuSqrt@12+0xb4>
 8f:
       dd 65 94
                                  frstor [ebp-0x6c]
 92:
       33 c0
                                  xor
                                          eax,eax
 94:
       c9
                                  leave
 95:
       c2 0c 00
                                  ret
                                          0xc
 98:
       83 f8 01
                                  cmp
                                          eax,0x1
 9b:
       74 04
                                  jе
                                          a1 < FpuSqrt@12+0xa1>
 9d:
       d9 eb
                                  fldpi
 9f:
       eb 13
                                  jmp
                                          b4 < FpuSqrt@12+0xb4>
 a1:
       83 f8 02
                                  cmp
                                          eax,0x2
 a4:
       74 e9
                                  jе
                                          8f < FpuSqrt@12+0x8f>
 a6:
       d9 e8
                                  fld1
 a8:
       d9 ea
                                  fldl2e
 aa:
       d8 e1
                                  fsub
                                          st, st(1)
 ac:
       d9 f0
                                  f2xm1
 ae:
       d8 c1
                                  fadd
                                          st, st(1)
                                  fscale
 b0:
       d9 fd
 b2:
       dd d9
                                  fstp
                                          st(1)
       d9 fa
 b4:
                                  fsqrt
 b6:
       9b df e0
                                  fstsw
                                          ax
 b9:
       9b
                                  fwait
 ba:
       d0 e8
                                  shr
                                          al,1
 bc:
       72 d1
                                  jb
                                          8f < FpuSgrt@12+0x8f>
 be:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
 c5:
       74 05
                                  jе
                                          cc < FpuSqrt@12+0xcc>
 c7:
       db 7d 8a
                                  fstp
                                          TBYTE PTR [ebp-0x76]
 ca:
       eb 1f
                                  jmp
                                          eb < FpuSqrt@12+0xeb>
 cc:
       8b 45 0c
                                  mov
                                          eax, DWORD PTR [ebp+0xc]
 cf:
       f7 45 10 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x10],0x100000
 d6:
       74 04
                                  jе
                                          dc < FpuSqrt@12+0xdc>
 d8:
       d9 18
                                  fstp
                                          DWORD PTR [eax]
 da:
       eb 0f
                                  jmp
                                          eb < FpuSqrt@12+0xeb>
 dc:
       f7 45
              10 00 00 20 00
                                  test
                                          DWORD PTR [ebp+0x10],0x200000
 e3:
       74 04
                                  jе
                                          e9 < FpuSqrt@12+0xe9>
 e5:
       dd 18
                                  fstp
                                          QWORD PTR [eax]
 e7:
       eb 02
                                  jmp
                                          eb <_FpuSqrt@12+0xeb>
 e9:
       db 38
                                  fstp
                                          TBYTE PTR [eax]
                                  frstor [ebp-0x6c]
 eb:
       dd 65 94
                                  test
 ee:
       f7 45 10 01 00 00 00
                                          DWORD PTR [ebp+0\times10],0\times1
 f5:
       74 02
                                  jе
                                          f9 < FpuSqrt@12+0xf9>
 f7:
       dd d8
                                  fstp
                                          st(0)
                                          DWORD PTR [ebp+0x10],0x80
 f9:
       f7 45 10 80 00 00 00
                                  test
100:
       74 05
                                          107 <_FpuSqrt@12+0x107>
                                  jе
                                  ffree
102:
       dd c7
                                          st(7)
       db 6d 8a
                                          TBYTE PTR [ebp-0x76]
104:
                                  fld
107:
       0c 01
                                  or
                                          al,0x1
109:
       c9
                                  leave
10a:
       c2 0c 00
                                          0xc
```

FpuSize.obj: file format pe-i386

```
00000000 < FpuSize@12>:
   0:
        55
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
                                           esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                           1c < FpuSize@12+0x1c>
                                   jе
   f:
        d9 e5
                                   fxam
        9b df e0
  11:
                                   fstsw
                                           ax
  14:
        9h
                                   fwait
```

```
9e
15:
                                 sahf
      73 04
16:
                                 jae
                                        1c < FpuSize@12+0x1c>
      7a 02
18:
                                 jр
                                        1c < FpuSize@12+0x1c>
                                        86 < FpuSize@12+0x86>
1a:
      74 6a
                                 jе
1c:
      9b dd 75 94
                                 fsave
                                        [ebp-0x6c]
20:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
27:
      74 08
                                 jе
                                        31 < FpuSize@12+0x31>
                                        eax, [ebp-0x6c]
29:
      8d 45 94
                                 lea
2c:
      db 68 1c
                                 fld
                                        TBYTE PTR [eax+0x1c]
2f:
      eb 5b
                                 jmp
                                        8c < FpuSize@12+0x8c>
31:
      8b 45 08
                                 mov
                                        eax, DWORD PTR [ebp+0x8]
34:
      f7 45 10 02 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x2
3b:
      74 04
                                 jе
                                        41 < FpuSize@12+0x41>
3d:
      db 28
                                 fld
                                        TBYTE PTR [eax]
3f:
      eb 4b
                                 jmp
                                        8c < FpuSize@12+0x8c>
                                        DWORD PTR [ebp+0x10],0x20000
41:
      f7 45
             10 00 00 02 00
                                 test
48:
      74 04
                                 jе
                                        4e < FpuSize@12+0x4e>
                                        QWORD PTR [eax]
4a:
      dd 00
                                 fld
4c:
      eb 3e
                                 jmp
                                        8c < FpuSize@12+0x8c>
                                        DWORD PTR [ebp+0x10],0x10000
4e:
      f7 45
             10 00 00 01 00
                                 test
55:
      74 04
                                 jе
                                        5b < FpuSize@12+0x5b>
                                        DWORD PTR [eax]
57:
      d9 00
                                 fld
59:
      eb 31
                                 jmp
                                        8c < FpuSize@12+0x8c>
                                        DWORD PTR [ebp+0x10],0x4
5b:
      f7 45
             10 04 00 00 00
                                 test
62:
      74 04
                                 jе
                                        68 < FpuSize@12+0x68>
64:
      db 00
                                 fild
                                        DWORD PTR [eax]
66:
      eb 24
                                 jmp
                                        8c < FpuSize@12+0x8c>
                                        DWORD PTR [ebp+0x10],0x1000000
68:
      f7 45
             10 00 00 00 01
                                 test
6f:
      74 04
                                 jе
                                        75 < FpuSize@12+0x75>
71:
      df
         28
                                 fild
                                        QWORD PTR [eax]
                                        8c < FpuSize@12+0x8c>
73:
      eb 17
                                 jmp
75:
      f7 45
             10 08 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x8
7c:
      74 05
                                 jе
                                        83 < FpuSize@12+0x83>
7e:
      db 45 08
                                 fild
                                        DWORD PTR [ebp+0x8]
81:
      eb 09
                                 jmp
                                        8c < FpuSize@12+0x8c>
83:
      dd 65 94
                                 frstor [ebp-0x6c]
      33 c0
86:
                                 xor
                                        eax, eax
88:
      c9
                                 leave
89:
      c2 0c 00
                                 ret
                                        0xc
      d9 e1
8c:
                                 fabs
8e:
      d9 e4
                                 ftst
90:
      9b df e0
                                 fstsw
                                        ax
93:
      9h
                                 fwait
94:
      9e
                                 sahf
95:
      75 0d
                                 jne
                                        a4 < FpuSize@12+0xa4>
97:
      72 ea
                                 jb
                                        83 < FpuSize@12+0x83>
99:
      8b 45 0c
                                 mov
                                        eax, DWORD PTR [ebp+0xc]
9c:
      c7 00 00 00 00 80
                                 mov
                                        DWORD PTR [eax],0x80000000
a2:
      eb 28
                                 jmp
                                        cc < FpuSize@12+0xcc>
                                 fldlg2
a4:
      d9 ec
a6:
      d9 c9
                                 fxch
                                        st(1)
                                 fyl2x
a8:
      d9 f1
aa:
      50
                                 push
                                        eax
ab:
      9b d9 3c 24
                                 fstcw
                                        WORD PTR [esp]
af:
      9b
                                 fwait
b0:
      66 8b 04 24
                                 mov
                                        ax, WORD PTR [esp]
b4:
      66 25 ff f3
                                 and
                                        ax,0xf3ff
b8:
      66 0d 00 04
                                        ax,0x400
                                 or
bc:
      50
                                 push
                                        eax
      d9 2c 24
bd:
                                 fldcw
                                        WORD PTR [esp]
c0:
      8b 45 0c
                                 mov
                                        eax, DWORD PTR [ebp+0xc]
c3:
      db 18
                                 fistp
                                        DWORD PTR [eax]
c5:
      d9 6c 24 04
                                 fldcw
                                        WORD PTR [esp+0x4]
c9:
      83 c4 08
                                 add
                                        esp,0x8
cc:
      dd 65 94
                                 frstor [ebp-0x6c]
      0c 01
cf:
                                        al,0x1
                                 or
d1:
      c9
                                 leave
d2:
      c2 0c 00
                                        0xc
                                 ret
```

```
00000000 < FpuSinh@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
                                          esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuSinh@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                          1c < FpuSinh@12+0x1c>
  18:
        7a 02
                                   jр
                                          1c < FpuSinh@12+0x1c>
                                          86 < FpuSinh@12+0x86>
  1a:
        74 6a
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                   ie
                                          31 < FpuSinh@12+0x31>
                                          eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        eb 5b
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  31:
        8b 45 08
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                          41 < FpuSinh@12+0x41>
                                          TBYTE PTR [eax]
  3d:
        db 28
                                   fld
  3f:
        eb 4b
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  41:
        f7 45
               10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                          4e < FpuSinh@12+0x4e>
  4a:
        dd 00
                                   fld
                                          QWORD PTR [eax]
  4c:
        eb 3e
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  4e:
        f7 45
               10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                   jе
                                          5b < FpuSinh@12+0x5b>
  57:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  59:
        eb 31
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  5b:
        f7 45
               10 04 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x4
  62:
        74 04
                                   jе
                                          68 < FpuSinh@12+0x68>
  64:
        db 00
                                   fild
                                          DWORD PTR [eax]
  66:
        eb 24
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  68:
        f7 45
               10 00 00 00 01
                                   test
                                          DWORD PTR [ebp+0x10],0x1000000
  6f:
        74 04
                                   jе
                                          75 < FpuSinh@12+0x75>
  71:
        df
           28
                                   fild
                                          QWORD PTR [eax]
  73:
        eb 17
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  75:
        f7 45 10 08 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x8
  7c:
        74 05
                                   jе
                                          83 < FpuSinh@12+0x83>
  7e:
        db 45 08
                                   fild
                                          DWORD PTR [ebp+0x8]
  81:
        eb 09
                                   jmp
                                          8c < FpuSinh@12+0x8c>
  83:
        dd 65 94
                                   frstor [ebp-0x6c]
  86:
        33 c0
                                   xor
                                          eax, eax
  88:
        c9
                                   leave
  89:
        c2 0c 00
                                   ret
                                          0xc
  8c:
        d9 ea
                                   fldl2e
  8e:
        de c9
                                   fmulp
                                          st(1),st
  90:
        d9 c0
                                   fld
                                          st(0)
  92:
        d9 fc
                                   frndint
  94:
        d9 c9
                                   fxch
                                          st(1)
  96:
        d8 e1
                                   fsub
                                          st, st(1)
  98:
        d9 f0
                                   f2xm1
  9a:
        d9 e8
                                   fld1
                                   faddp
  9c:
        de c1
                                          st(1),st
  9e:
        d9 fd
                                   fscale
  a0:
        dd d9
                                   fstp
                                          st(1)
  a2:
        d9 c0
                                   fld
                                          st(0)
  a4:
        d9 e8
                                   fld1
  a6:
        de f1
                                   fdivp st(1),st
  a8:
        de e9
                                   fsubrp st(1),st
  aa:
        d9 e8
                                   fld1
        d9 e0
                                   fchs
  ac:
        d9 c9
                                   fxch
                                          st(1)
  ae:
```

```
b0:
       d9 fd
                                  fscale
b2:
       dd d9
                                  fstp
                                         st(1)
b4:
       9b df e0
                                  fstsw
b7:
       9b
                                  fwait
b8:
       d0 e8
                                  shr
                                         al,1
                                         83 < FpuSinh@12+0x83>
ba:
       72 c7
                                  jЬ
bc:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
 c3:
       74 05
                                  jе
                                         ca < FpuSinh@12+0xca>
 c5:
       db 7d 8a
                                  fstp
                                         TBYTE PTR [ebp-0x76]
 c8:
       eb 1f
                                  jmp
                                         e9 < FpuSinh@12+0xe9>
 ca:
       8b 45 0c
                                  mov
                                         eax, DWORD PTR [ebp+0xc]
 cd:
       f7 45 10 00 00 10 00
                                  test
                                         DWORD PTR [ebp+0x10],0x100000
d4:
       74 04
                                  jе
                                         da < FpuSinh@12+0xda>
d6:
       d9 18
                                  fstp
                                         DWORD PTR [eax]
d8:
       eb 0f
                                  jmp
                                         e9 < FpuSinh@12+0xe9>
da:
       f7 45 10 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x10],0x200000
e1:
       74 04
                                  jе
                                         e7 < FpuSinh@12+0xe7>
e3:
       dd 18
                                  fstp
                                         QWORD PTR [eax]
e5:
       eb 02
                                  jmp
                                         e9 < FpuSinh@12+0xe9>
                                         TBYTE PTR [eax]
e7:
       db 38
                                  fstp
e9:
       dd 65 94
                                  frstor [ebp-0x6c]
 ec:
       f7 45 10 01 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x1
 f3:
       74 02
                                  jе
                                         f7 < FpuSinh@12+0xf7>
 f5:
       dd d8
                                  fstp
                                         st(0)
f7:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
 fe:
       74 05
                                  jе
                                         105 < FpuSinh@12+0x105>
100:
       dd c7
                                  ffree
                                         st(7)
                                         TBYTE PTR [ebp-0x76]
102:
       db 6d 8a
                                  fld
105:
       0c 01
                                         al,0x1
107:
       c9
                                  leave
108:
       c2 0c 00
                                         0xc
```

FpuSin.obj: file format pe-i386

```
00000000 < FpuSin@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuSin@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9h
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuSin@12+0x1c>
                                          1c <_FpuSin@12+0x1c>
  18:
        7a 02
                                   jр
                                          86 <_FpuSin@12+0x86>
  1a:
        74 6a
                                   ie
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
                                          DWORD PTR [ebp+0x10],0x1
  20:
        f7 45 10 01 00 00 00
                                   test
  27:
        74 08
                                   jе
                                          31 <_FpuSin@12+0x31>
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        eb 5b
                                   jmp
                                          8c < FpuSin@12+0x8c>
  31:
        8b 45 08
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                          41 < FpuSin@12+0x41>
                                   jе
  3d:
        db 28
                                   fld
                                          TBYTE PTR [eax]
  3f:
        eb 4b
                                   jmp
                                          8c < FpuSin@12+0x8c>
  41:
        f7 45
               10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                          4e < FpuSin@12+0x4e>
                                          QWORD PTR [eax]
  4a:
        dd 00
                                   fld
  4c:
        eb 3e
                                   jmp
                                          8c < FpuSin@12+0x8c>
  4e:
        f7 45
               10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
                                          5b <_FpuSin@12+0x5b>
  55:
        74 04
                                   jе
                                          DWORD PTR [eax]
  57:
        d9 00
                                   fld
  59:
        eb 31
                                          8c < FpuSin@12+0x8c>
                                   jmp
                                          DWORD PTR [ebp+0x10],0x4
  5b:
        f7 45 10 04 00 00 00
                                   test
```

```
74 04
62:
                                  jе
                                         68 < FpuSin@12+0x68>
64:
       db 00
                                         DWORD PTR [eax]
                                  fild
66:
       eb 24
                                  jmp
                                         8c < FpuSin@12+0x8c>
                                         DWORD PTR [ebp+0x10],0x1000000
68:
       f7 45 10 00 00 00 01
                                  test
6f:
       74 04
                                  jе
                                         75 < FpuSin@12+0x75>
71:
       df 28
                                  fild
                                         QWORD PTR [eax]
 73:
       eb 17
                                  jmp
                                         8c < FpuSin@12+0x8c>
 75:
       f7 45 10 08 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x8
 7c:
       74 05
                                  jе
                                         83 < FpuSin@12+0x83>
 7e:
       db 45 08
                                  fild
                                         DWORD PTR [ebp+0x8]
81:
       eb 09
                                  jmp
                                         8c < FpuSin@12+0x8c>
83:
       dd 65 94
                                  frstor [ebp-0x6c]
86:
       33 c0
                                  xor
                                         eax, eax
88:
       c9
                                  leave
89:
       c2 0c 00
                                  ret
                                         0xc
                                         DWORD PTR [ebp+0x10],0x20
8c:
       f7 45 10 20 00 00 00
                                  test
93:
       75 0e
                                  jne
                                         a3 < FpuSin@12+0xa3>
95:
       d9 eb
                                  fldpi
97:
       de c9
                                  fmulp
                                         st(1), st
99:
       68 b4 00 00 00
                                  push
                                         0xb4
9e:
       de 34 24
                                  fidiv
                                         WORD PTR [esp]
a1:
       9b
                                  fwait
a2:
       58
                                  pop
                                         eax
a3:
       d9 eb
                                  fldpi
a5:
       d8 c0
                                  fadd
                                         st, st(0)
a7:
       d9 c9
                                  fxch
                                         st(1)
a9:
       d9 f8
                                  fprem
ab:
       d9 fe
                                  fsin
ad:
       9b df e0
                                  fstsw
                                         ax
b0:
       9b
                                  fwait
b1:
       d0 e8
                                  shr
                                         al,1
b3:
       72 ce
                                  jb
                                         83 < FpuSin@12+0x83>
b5:
       9e
                                  sahf
b6:
       7a f1
                                  jр
                                         a9 < FpuSin@12+0xa9>
b8:
       dd d9
                                  fstp
                                         st(1)
ha:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
 c1:
       74 05
                                  jе
                                         c8 < FpuSin@12+0xc8>
 c3:
       db 7d 8a
                                  fstp
                                         TBYTE PTR [ebp-0x76]
 c6:
       eb 1f
                                  jmp
                                         e7 < FpuSin@12+0xe7>
 c8:
       8b 45 0c
                                  mov
                                         eax, DWORD PTR [ebp+0xc]
cb:
       f7 45 10 00 00 10 00
                                  test
                                         DWORD PTR [ebp+0x10],0x100000
d2:
       74 04
                                  jе
                                         d8 < FpuSin@12+0xd8>
d4:
       d9
          18
                                  fstp
                                         DWORD PTR [eax]
       eb 0f
d6:
                                  jmp
                                         e7 < FpuSin@12+0xe7>
d8:
       f7 45 10 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x10],0x200000
df:
       74 04
                                  jе
                                         e5 < FpuSin@12+0xe5>
e1:
       dd 18
                                  fstp
                                         QWORD PTR [eax]
e3:
       eb 02
                                  jmp
                                         e7 <_FpuSin@12+0xe7>
e5:
       db 38
                                  fstp
                                         TBYTE PTR [eax]
e7:
                                  frstor [ebp-0x6c]
       dd 65 94
       f7 45 10 01 00 00 00
                                         DWORD PTR [ebp+0x10],0x1
ea:
                                  test
 f1:
       74 02
                                  je
                                         f5 < FpuSin@12+0xf5>
 f3:
       dd d8
                                  fstp
                                         st(0)
 f5:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
fc:
       74 05
                                         103 < FpuSin@12+0x103>
                                  iе
fe:
       dd c7
                                  ffree
                                         st(7)
100:
       db 6d 8a
                                  fld
                                         TBYTE PTR [ebp-0x76]
103:
       0c 01
                                  or
                                         al,0x1
105:
       c9
                                  leave
                                         0xc
106:
       c2 0c 00
                                  ret
```

FpuRound.obj: file format pe-i386

Disassembly of section .text:

```
00000000 < FpuRound@12>:
```

0: 55 push ebp 1: 8b ec mov ebp,esp

3: 83 c4 88 add esp,0xffffff88

```
6:
      f7 45 10 01 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x1
 d:
      74 0d
                                 jе
                                         1c < FpuRound@12+0x1c>
 f:
      d9 e5
                                 fxam
11:
      9b df e0
                                 fstsw
14:
      9h
                                 fwait
15:
      9e
                                 sahf
16:
      73 04
                                 jae
                                         1c < FpuRound@12+0x1c>
18:
      7a 02
                                         1c < FpuRound@12+0x1c>
                                 jр
1a:
      74 42
                                         5e < FpuRound@12+0x5e>
                                 jе
1c:
      9b dd
             75 94
                                 fsave
                                         [ebp-0x6c]
20:
      f7 45
             10 01 00 00 00
                                 test
                                         DWORD PTR [ebp+0\times10],0\times1
27:
      74 08
                                 ie
                                         31 < FpuRound@12+0x31>
                                         eax, [ebp-0x6c]
29:
      8d 45 94
                                 lea
2c:
      db 68
             1c
                                 fld
                                         TBYTE PTR [eax+0x1c]
2f:
      eb 33
                                 jmp
                                         64 < FpuRound@12+0x64>
31:
      8b 45 08
                                 mov
                                         eax,DWORD PTR [ebp+0x8]
34:
      f7 45 10 02 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x2
3b:
      74 04
                                 jе
                                         41 <_FpuRound@12+0x41>
                                         TBYTE PTR [eax]
3d:
      db 28
                                 fld
3f:
      eb 23
                                 jmp
                                         64 < FpuRound@12+0x64>
41:
      f7 45 10 00 00 02 00
                                 test
                                         DWORD PTR [ebp+0x10],0x20000
48:
      74 04
                                 jе
                                         4e < FpuRound@12+0x4e>
                                         QWORD PTR [eax]
4a:
      dd 00
                                 fld
4c:
      eb 16
                                 jmp
                                         64 < FpuRound@12+0x64>
4e:
      f7 45
             10 00 00 01 00
                                 test
                                         DWORD PTR [ebp+0x10],0x10000
55:
      74 04
                                 jе
                                         5b < FpuRound@12+0x5b>
57:
      d9 00
                                 fld
                                         DWORD PTR [eax]
59:
      eb 09
                                 jmp
                                         64 < FpuRound@12+0x64>
5b:
      dd 65 94
                                 frstor [ebp-0x6c]
5e:
      33 c0
                                 xor
                                         eax, eax
      c9
60:
                                 leave
                                         0xc
61:
      c2 0c 00
                                 ret
64:
      50
                                 push
                                         eax
65:
      9b d9 3c 24
                                 fstcw
                                         WORD PTR [esp]
69:
      9h
                                 fwait
6a:
      66 8b 04 24
                                 mov
                                         ax, WORD PTR [esp]
6e:
      66 25 ff f3
                                 and
                                         ax,0xf3ff
72:
      50
                                 push
                                         eax
                                        WORD PTR [esp]
73:
      d9 2c 24
                                 fldcw
76:
      d9 fc
                                 frndint
78:
      58
                                 pop
                                         eax
79:
      d9 2c 24
                                 fldcw
                                        WORD PTR [esp]
7c:
      9b df e0
                                 fstsw
                                         ax
7f:
      9h
                                 fwait
80:
      d0 e8
                                 shr
                                         al,1
82:
      58
                                 pop
                                         eax
                                         5b <_FpuRound@12+0x5b>
83:
      72 d6
                                 jb
85:
      f7 45 10 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x80
                                         93 <_FpuRound@12+0x93>
8c:
      74 05
                                 jе
      db 7d 8a
                                         TBYTE PTR [ebp-0x76]
8e:
                                 fstp
                                         cc <_FpuRound@12+0xcc>
91:
      eb 39
                                 jmp
                                         eax, DWORD PTR [ebp+0xc]
93:
      8b 45 0c
                                 mov
      f7 45 10 40 00 00 00
96:
                                 test
                                         DWORD PTR [ebp+0\times10],0\times40
9d:
      74 04
                                 je
                                         a3 < FpuRound@12+0xa3>
9f:
      db 18
                                 fistp
                                         DWORD PTR [eax]
a1:
      eb 4b
                                 jmp
                                         ee < FpuRound@12+0xee>
a3:
      f7 45 10 00 00 40 00
                                 test
                                         DWORD PTR [ebp+0x10],0x400000
      74 04
                                         b0 < FpuRound@12+0xb0>
aa:
                                 iе
ac:
      df
         38
                                 fistp
                                         QWORD PTR [eax]
ae:
      eb 3e
                                 jmp
                                         ee < FpuRound@12+0xee>
b0:
      f7 45
             10 00 00 10 00
                                 test
                                         DWORD PTR [ebp+0x10],0x100000
b7:
      74 04
                                         bd < FpuRound@12+0xbd>
                                 jе
                                 fstp
h9:
      d9 18
                                         DWORD PTR [eax]
hh:
      eb 0f
                                 jmp
                                         cc < FpuRound@12+0xcc>
                                 test
bd:
      f7 45 10 00 00 20 00
                                         DWORD PTR [ebp+0x10],0x200000
c4:
      74 04
                                         ca < FpuRound@12+0xca>
                                 1e
c6:
      dd 18
                                 fstp
                                         QWORD PTR [eax]
c8:
      eb 02
                                         cc < FpuRound@12+0xcc>
                                 jmp
                                         TBYTE PTR [eax]
      db 38
ca:
                                 fstp
      dd 65 94
                                 frstor [ebp-0x6c]
cc:
```

```
cf:
      f7 45 10 01 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x1
d6:
      74 02
                                 jе
                                         da < FpuRound@12+0xda>
d8:
      dd d8
                                 fstp
                                         st(0)
                                         DWORD PTR [ebp+0x10],0x80
da:
      f7 45 10 80 00 00 00
                                 test
e1:
      74 05
                                 jе
                                         e8 < FpuRound@12+0xe8>
e3:
      dd c7
                                 ffree
                                         st(7)
                                         TBYTE PTR [ebp-0x76]
e5:
      db 6d 8a
                                 fld
e8:
      0c 01
                                 or
                                         al,0x1
ea:
      c9
                                 leave
eb:
      c2 0c 00
                                 ret
                                         0xc
ee:
      9b df e0
                                 fstsw
f1:
      9b
                                 fwait
f2:
      d0 e8
                                 shr
                                         al,1
f4:
      0f 82 61 ff ff ff
                                 jb
                                         5b < FpuRound@12+0x5b>
fa:
      eb d0
                                 jmp
                                         cc < FpuRound@12+0xcc>
```

FpuMul.obj: file format pe-i386

```
00000000 < FpuMul@16>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 14 01 01 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x101
   d:
        74 0d
                                   jе
                                          1c < FpuMul@16+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuMul@16+0x1c>
  18:
        7a 02
                                   jр
                                          1c < FpuMul@16+0x1c>
  1a:
        74 76
                                   jе
                                          92 < FpuMul@16+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 14 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x1
  27:
        74 0b
                                   jе
                                          34 < FpuMul@16+0x34>
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        e9 80 00 00 00
                                   jmp
                                          b4 < FpuMul@16+0xb4>
  34:
        8b 45 08
                                   mov
                                          eax,DWORD PTR [ebp+0x8]
  37:
        f7 45
               14 10 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x10
  3e:
        75
           58
                                   jne
                                          98 < FpuMul@16+0x98>
  40:
        f7 45 14 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x2
  47:
        74 04
                                   jе
                                          4d < FpuMul@16+0x4d>
  49:
        db 28
                                   fld
                                          TBYTE PTR [eax]
                                          b4 <_FpuMul@16+0xb4>
  4b:
        eb 67
                                   jmp
  4d:
        f7 45 14 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x14],0x20000
  54:
        74 04
                                   jе
                                          5a < FpuMul@16+0x5a>
        dd 00
                                   fld
                                          QWORD PTR [eax]
  56:
  58:
                                          b4 < FpuMul@16+0xb4>
        eb 5a
                                   jmp
        f7 45 14 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x14],0x10000
  5a:
                                          67 <_FpuMul@16+0x67>
        74 04
  61:
                                   jе
  63:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  65:
        eb 4d
                                   jmp
                                          b4 < FpuMul@16+0xb4>
  67:
        f7 45 14 04 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x4
                                          74 <_FpuMul@16+0x74>
  6e:
        74 04
                                   jе
  70:
        db 00
                                   fild
                                          DWORD PTR [eax]
  72:
        eb 40
                                   jmp
                                          b4 < FpuMul@16+0xb4>
  74:
        f7 45 14 00 00 00 01
                                   test
                                          DWORD PTR [ebp+0x14],0x1000000
                                          81 <_FpuMul@16+0x81>
  7b:
        74 04
                                   jе
  7d:
        df
           28
                                   fild
                                          QWORD PTR [eax]
                                          b4 <_FpuMul@16+0xb4>
  7f:
        eh 33
                                   jmp
  81:
        f7 45 14 08 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x8
                                          8f < FpuMul@16+0x8f>
  88:
        74 05
                                   jе
  8a:
        db 45 08
                                   fild
                                          DWORD PTR [ebp+0x8]
  8d:
        eb 25
                                   jmp
                                          b4 < FpuMul@16+0xb4>
  8f:
        dd 65 94
                                   frstor [ebp-0x6c]
        33 c0
  92:
                                   xor
                                          eax, eax
  94:
        c9
                                   leave
```

```
95:
       c2 10 00
                                  ret
                                          0x10
98:
       83 f8 01
                                  cmp
                                          eax,0x1
       75 04
9b:
                                  jne
                                          a1 < FpuMul@16+0xa1>
9d:
       d9 eb
                                  fldpi
                                          b4 < FpuMul@16+0xb4>
9f:
       eb 13
                                  jmp
a1:
       83 f8 02
                                  cmp
                                          eax,0x2
a4:
       75 e9
                                  jne
                                          8f < FpuMul@16+0x8f>
a6:
       d9 e8
                                  fld1
a8:
       d9 ea
                                  fldl2e
       d8 e1
                                  fsub
                                          st, st(1)
aa:
ac:
       d9 f0
                                  f2xm1
 ae:
       d8
          с1
                                  fadd
                                          st, st(1)
b0:
       d9 fd
                                  fscale
b2:
       dd d9
                                  fstp
                                          st(1)
b4:
       f7 45
              14 00 01 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x100
bb:
       74 0b
                                  jе
                                          c8 < FpuMul@16+0xc8>
                                          eax, [ebp-0x6c]
bd:
       8d 45 94
                                  lea
 c0:
       db 68 1c
                                  fld
                                          TBYTE PTR [eax+0x1c]
 c3:
       e9 80 00 00 00
                                  jmp
                                          148 < FpuMul@16+0x148>
 c8:
       8b 45 0c
                                  mov
                                          eax, DWORD PTR [ebp+0xc]
 cb:
       f7 45 14 00 10 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x1000
                                  jne
d2:
       75
          54
                                          128 < FpuMul@16+0x128>
                                          DWORD PTR [ebp+0x14],0x200
d4:
       f7 45 14 00 02 00 00
                                  test
db:
       74 04
                                  jе
                                          e1 < FpuMul@16+0xe1>
                                          TBYTE PTR [eax]
dd:
       db 28
                                  fld
df:
       eb 67
                                  jmp
                                          148 < FpuMul@16+0x148>
                                          DWORD PTR [ebp+0x14],0x80000
e1:
       f7 45
              14 00 00 08 00
                                  test
 e8:
       74 04
                                  jе
                                          ee < FpuMul@16+0xee>
 ea:
       dd 00
                                  fld
                                          QWORD PTR [eax]
       eb 5a
ec:
                                  jmp
                                          148 < FpuMul@16+0x148>
                                          DWORD PTR [ebp+0x14],0x40000
 ee:
       f7 45
              14 00 00 04 00
                                  test
 f5:
       74 04
                                  jе
                                          fb < FpuMul@16+0xfb>
 f7:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 f9:
       eb 4d
                                  jmp
                                          148 < FpuMul@16+0x148>
 fb:
       f7 45
              14 00 04 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x400
                                          108 < FpuMul@16+0x108>
102:
       74 04
                                  jе
                                          DWORD PTR [eax]
104:
       db 00
                                  fild
106:
       eb 40
                                  jmp
                                          148 < FpuMul@16+0x148>
                                  test
108:
       f7 45
              14 00 00 00 02
                                          DWORD PTR [ebp+0x14],0x2000000
                                          115 < FpuMul@16+0x115>
10f:
       74 04
                                  jе
111:
       df
          28
                                  fild
                                          QWORD PTR [eax]
       eb 33
113:
                                  jmp
                                          148 < FpuMul@16+0x148>
115:
       f7 45
              14 00 08 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times800
11c:
       74 05
                                  jе
                                          123 < FpuMul@16+0x123>
11e:
       db 45 0c
                                  fild
                                          DWORD PTR [ebp+0xc]
121:
       eb 25
                                  jmp
                                          148 < FpuMul@16+0x148>
123:
       e9 67 ff ff ff
                                  jmp
                                          8f < FpuMul@16+0x8f>
128:
       83 f8 01
                                  cmp
                                          eax,0x1
       75 04
12b:
                                  ine
                                          131 < FpuMul@16+0x131>
       d9 eb
12d:
                                  fldpi
12f:
       eb
          17
                                  jmp
                                          148 < FpuMul@16+0x148>
       83 f8 02
131:
                                  cmp
                                          eax,0x2
       0f 85 55 ff ff ff
                                  jne
134:
                                          8f < FpuMul@16+0x8f>
13a:
       d9 e8
                                  fld1
13c:
       d9 ea
                                  fldl2e
13e:
       d8 e1
                                  fsub
                                          st, st(1)
140:
       d9 f0
                                  f2xm1
142:
       d8 c1
                                  fadd
                                          st, st(1)
144:
       d9 fd
                                  fscale
146:
       dd d9
                                  fstp
                                          st(1)
                                  fmulp
148:
       de c9
                                          st(1),st
14a:
       9b df e0
                                  fstsw
                                          ax
14d:
       9h
                                  fwait
14e:
       d1 e8
                                  shr
                                          eax,1
                                          8f < FpuMul@16+0x8f>
150:
       0f 82 39 ff ff ff
                                  jb
156:
       f7 45 14 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x80
15d:
       74 05
                                          164 < FpuMul@16+0x164>
                                  jе
                                          TBYTE PTR [ebp-0x76]
15f:
       db 7d 8a
                                  fstp
162:
       eh 1f
                                          183 < FpuMul@16+0x183>
                                  jmp
164:
       8b 45 10
                                          eax, DWORD PTR [ebp+0x10]
                                  mov
```

```
DWORD PTR [ebp+0x14],0x100000
167:
       f7 45 14 00 00 10 00
                                 test
16e:
       74 04
                                 jе
                                         174 < FpuMul@16+0x174>
                                         DWORD PTR [eax]
170:
       d9 18
                                  fstp
172:
       eb 0f
                                  jmp
                                         183 < FpuMul@16+0x183>
174:
       f7 45 14 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x14],0x200000
17b:
       74 04
                                         181 < FpuMul@16+0x181>
                                  jе
                                         QWORD PTR [eax]
17d:
       dd 18
                                  fstp
17f:
       eb 02
                                  jmp
                                         183 < FpuMul@16+0x183>
                                         TBYTE PTR [eax]
181:
       db 38
                                  fstp
183:
       dd 65 94
                                  frstor [ebp-0x6c]
186:
       f7 45 14 01 01 00 00
                                 test
                                         DWORD PTR [ebp+0x14],0x101
18d:
       74 02
                                  jе
                                         191 < FpuMul@16+0x191>
18f:
       dd d8
                                  fstp
                                         st(0)
191:
       f7 45 14 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0x14],0x80
198:
       74 05
                                  jе
                                         19f < FpuMul@16+0x19f>
19a:
       dd c7
                                  ffree
                                         st(7)
                                         TBYTE PTR [ebp-0x76]
19c:
       db 6d 8a
                                 fld
19f:
       0c 01
                                         al,0x1
1a1:
       c9
                                 leave
1a2:
       c2 10 00
                                  ret
                                         0x10
```

FpuMod.obj: file format pe-i386

```
00000000 < FpuMod@16>:
   0:
                                  push
                                          ebp
   1:
        8b ec
                                  mov
                                          ebp,esp
   3:
        83 c4 88
                                  add
                                          esp,0xffffff88
   6:
        f7 45 14 01 01 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x101
   d:
        74 0d
                                  jе
                                          1c < FpuMod@16+0x1c>
   f:
        d9 e5
                                  fxam
  11:
        9b df e0
                                  fstsw
                                          ax
  14:
        9b
                                  fwait
  15:
        9e
                                  sahf
                                          1c < FpuMod@16+0x1c>
  16:
        73 04
                                  jae
        7a 02
  18:
                                  jр
                                          1c < FpuMod@16+0x1c>
  1a:
        74 76
                                  jе
                                          92 < FpuMod@16+0x92>
  1c:
        9b dd 75 94
                                  fsave
                                          [ebp-0x6c]
  20:
        f7 45 14 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x1
  27:
        74 0b
                                  jе
                                          34 < FpuMod@16+0x34>
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
                                          TBYTE PTR [eax+0x1c]
  2c:
        db 68 1c
                                  fld
                                          b8 <_FpuMod@16+0xb8>
  2f:
        e9 84 00 00 00
                                  jmp
  34:
        8b 45 08
                                  mov
                                          eax,DWORD PTR [ebp+0x8]
  37:
        f7 45
              14 10 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x10
                                          98 <_FpuMod@16+0x98>
  3e:
        75 58
                                  jne
  40:
        f7 45 14 02 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x2
  47:
        74 04
                                          4d < FpuMod@16+0x4d>
                                  ie
        db 28
                                  fld
                                          TBYTE PTR [eax]
  49:
  4b:
        eb 6b
                                  jmp
                                          b8 <_FpuMod@16+0xb8>
  4d:
        f7 45 14 00 00 02 00
                                  test
                                          DWORD PTR [ebp+0x14],0x20000
 54:
        74 04
                                  jе
                                          5a < FpuMod@16+0x5a>
 56:
        dd 00
                                  fld
                                          QWORD PTR [eax]
 58:
        eb 5e
                                  jmp
                                          b8 < FpuMod@16+0xb8>
 5a:
        f7 45 14 00 00 01 00
                                  test
                                          DWORD PTR [ebp+0x14],0x10000
 61:
        74 04
                                          67 < FpuMod@16+0x67>
                                  jе
 63:
        d9 00
                                  fld
                                          DWORD PTR [eax]
 65:
        eb 51
                                  jmp
                                          b8 < FpuMod@16+0xb8>
 67:
        f7 45 14 04 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x4
 6e:
        74 04
                                          74 < FpuMod@16+0x74>
                                  jе
  70:
        db 00
                                  fild
                                          DWORD PTR [eax]
  72:
        eb 44
                                  jmp
                                          b8 < FpuMod@16+0xb8>
  74:
        f7 45 14 00 00 00 01
                                  test
                                          DWORD PTR [ebp+0x14],0x1000000
  7b:
        74 04
                                          81 < FpuMod@16+0x81>
                                  1e
  7d:
        df
           28
                                  fild
                                          QWORD PTR [eax]
  7f:
        eh 37
                                          b8 < FpuMod@16+0xb8>
                                  jmp
 81:
        f7 45 14 08 00 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x8
 88:
        74 05
                                          8f < FpuMod@16+0x8f>
                                  jе
```

```
DWORD PTR [ebp+0x8]
       db 45 08
8a:
                                  fild
       eb 29
8d:
                                  jmp
                                          b8 < FpuMod@16+0xb8>
8f:
       dd 65 94
                                  frstor [ebp-0x6c]
92:
       33 c0
                                  xor
                                          eax,eax
94:
       c9
                                  leave
95:
       c2 10 00
                                  ret
                                          0x10
98:
       a9 01 00 00 00
                                  test
                                          eax,0x1
9d:
       74 04
                                  jе
                                          a3 < FpuMod@16+0xa3>
9f:
       d9 eb
                                  fldpi
a1:
       eb 15
                                  jmp
                                          b8 < FpuMod@16+0xb8>
a3:
       a9 02 00 00 00
                                  test
                                          eax,0x2
a8:
       74 e5
                                  jе
                                          8f < FpuMod@16+0x8f>
aa:
       d9 e8
                                  fld1
ac:
       d9 ea
                                  fldl2e
 ae:
       d8 e1
                                  fsub
                                          st, st(1)
b0:
       d9 f0
                                  f2xm1
b2:
       d8 c1
                                  fadd
                                          st, st(1)
b4:
       d9 fd
                                  fscale
b6:
       dd d9
                                  fstp
                                          st(1)
b8:
       f7 45
              14 00 01 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x100
bf:
       74 0b
                                  jе
                                          cc < FpuMod@16+0xcc>
                                          eax, [ebp-0x6c]
 c1:
       8d 45 94
                                  lea
                                          TBYTE PTR [eax+0x1c]
 c4:
       db 68 1c
                                  fld
 c7:
       e9 80 00 00 00
                                  jmp
                                          14c < FpuMod@16+0x14c>
                                          eax, DWORD PTR [ebp+0xc]
 cc:
       8b 45 0c
                                  mov
 cf:
       f7 45 14 00 10 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x1000
                                  jne
d6:
       75 54
                                          12c < FpuMod@16+0x12c>
                                          DWORD PTR [ebp+0x14],0x200
d8:
       f7 45 14 00 02 00 00
                                  test
df:
       74 04
                                  jе
                                          e5 < FpuMod@16+0xe5>
                                          TBYTE PTR [eax]
e1:
       db 28
                                  fld
e3:
       eb 67
                                  jmp
                                          14c < FpuMod@16+0x14c>
                                          DWORD PTR [ebp+0x14],0x80000
e5:
       f7 45
              14 00 00 08 00
                                  test
ec:
       74 04
                                  jе
                                          f2 < FpuMod@16+0xf2>
ee:
       dd 00
                                  fld
                                          QWORD PTR [eax]
 f0:
       eb 5a
                                  jmp
                                          14c < FpuMod@16+0x14c>
                                          DWORD PTR [ebp+0x14],0x40000
 f2:
       f7 45
              14 00 00 04 00
                                  test
 f9:
       74 04
                                  jе
                                          ff < FpuMod@16+0xff>
 fb:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 fd:
       eb 4d
                                  jmp
                                          14c < FpuMod@16+0x14c>
                                          DWORDPTR [ebp+0x14],0x400
 ff:
       f7 45
              14 00 04 00 00
                                  test
106:
       74 04
                                  jе
                                          10c < FpuMod@16+0x10c>
                                          DWORD PTR [eax]
108:
       db 00
                                  fild
10a:
       eb 40
                                  jmp
                                          14c < FpuMod@16+0x14c>
10c:
       f7 45
              14 00 00 00 02
                                  test
                                          DWORD PTR [ebp+0x14],0x2000000
113:
       74 04
                                  jе
                                          119 < FpuMod@16+0x119>
115:
       df
          28
                                  fild
                                          QWORD PTR [eax]
                                          14c <_FpuMod@16+0x14c>
117:
       eb 33
                                  jmp
119:
       f7 45 14 00 08 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times800
120:
       74 05
                                  jе
                                          127 < FpuMod@16+0x127>
       db 45 0c
                                  fild
                                          DWORD PTR [ebp+0xc]
122:
       eb 25
                                          14c < FpuMod@16+0x14c>
125:
                                  jmp
       e9 63 ff ff ff
                                          8f < FpuMod@16+0x8f>
127:
                                  jmp
       83 f8 01
12c:
                                  cmp
                                          eax,0x1
12f:
       75 04
                                  jne
                                          135 < FpuMod@16+0x135>
131:
       d9 eb
                                  fldpi
133:
       eb 17
                                  jmp
                                          14c < FpuMod@16+0x14c>
135:
       83 f8 02
                                  cmp
                                          eax,0x2
138:
       0f 85 51 ff ff ff
                                  jne
                                          8f < FpuMod@16+0x8f>
13e:
       d9 e8
                                  fld1
140:
       d9 ea
                                  fldl2e
142:
       d8 e1
                                  fsub
                                          st, st(1)
144:
       d9 f0
                                  f2xm1
146:
       d8 c1
                                  fadd
                                          st, st(1)
148:
       d9 fd
                                  fscale
                                  fstp
14a:
       dd d9
                                          st(1)
14c:
       d9 c9
                                  fxch
                                          st(1)
14e:
       d9 f8
                                  fprem
       9b df e0
150:
                                  fstsw
                                          ax
153:
       9h
                                  fwait
154:
       d0 e8
                                  shr
                                          al,1
```

```
156:
       0f 82 33 ff ff ff
                                  jЬ
                                         8f < FpuMod@16+0x8f>
15c:
       9e
                                  sahf
15d:
                                          14e < FpuMod@16+0x14e>
       7a ef
                                  jр
15f:
       f7 45 14 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x14],0x80
166:
       74 05
                                  jе
                                         16d < FpuMod@16+0x16d>
168:
       db 7d 8a
                                  fstp
                                         TBYTE PTR [ebp-0x76]
16b:
       eb 1f
                                  jmp
                                         18c < FpuMod@16+0x18c>
16d:
       8b 45
             10
                                  mov
                                         eax, DWORD PTR [ebp+0x10]
170:
       f7 45 14 00 00 10 00
                                  test
                                         DWORD PTR [ebp+0x14],0x100000
177:
       74 04
                                         17d < FpuMod@16+0x17d>
                                  jе
                                         DWORD PTR [eax]
179:
       d9 18
                                  fstp
17b:
       eb 0f
                                  jmp
                                         18c < FpuMod@16+0x18c>
17d:
       f7 45 14 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x14],0x200000
184:
       74 04
                                  jе
                                         18a < FpuMod@16+0x18a>
                                         QWORD PTR [eax]
186:
       dd 18
                                  fstp
188:
       eb 02
                                  jmp
                                         18c < FpuMod@16+0x18c>
                                         TBYTE PTR [eax]
18a:
       db 38
                                  fstp
18c:
       dd 65 94
                                  frstor [ebp-0x6c]
18f:
       f7 45 14 01 01 00 00
                                  test
                                         DWORD PTR [ebp+0\times14],0\times101
196:
       74 02
                                  jе
                                         19a < FpuMod@16+0x19a>
                                  fstp
198:
       dd d8
                                         st(0)
19a:
       f7 45 14 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x14],0x80
1a1:
       74 05
                                  jе
                                         1a8 < FpuMod@16+0x1a8>
1a3:
       dd c7
                                  ffree
                                         st(7)
1a5:
       db 6d 8a
                                  fld
                                         TBYTE PTR [ebp-0x76]
1a8:
       0c 01
                                         al,0x1
1aa:
       c9
                                  leave
lab:
       c2 10 00
                                  ret
                                         0x10
```

FpuLogx.obj: file format pe-i386

```
00000000 < FpuLogx@12>:
   0:
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
         f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0\times10],0\times1
   d:
        74 0d
                                   jе
                                           1c < FpuLogx@12+0x1c>
        d9 e5
   f:
                                   fxam
  11:
        9b df e0
                                   fstsw
                                           ax
  14:
        9h
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                           1c < FpuLogx@12+0x1c>
        7a 02
  18:
                                   jр
                                           1c < FpuLogx@12+0x1c>
  1a:
        74 76
                                   ie
                                           92 <_FpuLogx@12+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
  20:
         f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0\times10],0\times1
                                           34 < FpuLogx@12+0x34>
  27:
        74 0b
                                   jе
        8d 45 94
  29:
                                    lea
                                           eax,[ebp-0x6c]
  2c:
        db 68 1c
                                   fld
                                           TBYTE PTR [eax+0x1c]
        e9 80 00 00 00
  2f:
                                   jmp
                                           b4 < FpuLogx@12+0xb4>
  34:
        8b 45 08
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
  37:
        f7 45 10 10 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x10
  3e:
        75 58
                                   jne
                                           98 < FpuLogx@12+0x98>
                                           DWORD PTR [ebp+0\times10],0\times2
  40:
        f7 45 10 02 00 00 00
                                   test
                                           4d < FpuLogx@12+0x4d>
  47:
        74 04
                                   jе
  49:
        db 28
                                   fld
                                           TBYTE PTR [eax]
  4b:
        eb 67
                                   jmp
                                           b4 < FpuLogx@12+0xb4>
                                           DWORD PTR [ebp+0x10],0x20000
  4d:
        f7 45 10 00 00 02 00
                                   test
  54:
        74 04
                                   jе
                                           5a < FpuLogx@12+0x5a>
  56:
        dd 00
                                   fld
                                           QWORD PTR [eax]
  58:
        eh 5a
                                   jmp
                                           b4 < FpuLogx@12+0xb4>
  5a:
        f7 45 10 00 00 01 00
                                   test
                                           DWORD PTR [ebp+0x10],0x10000
  61:
        74 04
                                   jе
                                           67 < FpuLogx@12+0x67>
                                           DWORD PTR [eax]
  63:
        d9 00
                                   fld
  65:
        eb 4d
                                           b4 < FpuLogx@12+0xb4>
                                   jmp
  67:
         f7 45 10 04 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x4
  6e:
        74 04
                                           74 < FpuLogx@12+0x74>
                                   1e
```

```
db 00
                                         DWORD PTR [eax]
 70:
                                  fild
 72:
       eb 40
                                  jmp
                                         b4 < FpuLogx@12+0xb4>
 74:
       f7 45 10 00 00 00 01
                                  test
                                         DWORD PTR [ebp+0x10],0x1000000
 7b:
       74 04
                                  jе
                                         81 < FpuLogx@12+0x81>
 7d:
       df 28
                                  fild
                                         QWORD PTR [eax]
 7f:
       eb 33
                                  jmp
                                         b4 < FpuLogx@12+0xb4>
81:
       f7 45 10 08 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x8
88:
       74 05
                                  jе
                                         8f < FpuLogx@12+0x8f>
8a:
       db 45 08
                                  fild
                                         DWORD PTR [ebp+0x8]
8d:
       eb 25
                                  jmp
                                         b4 < FpuLogx@12+0xb4>
8f:
       dd 65 94
                                  frstor [ebp-0x6c]
92:
       33 c0
                                  xor
                                         eax,eax
94:
       c9
                                  leave
95:
       c2 0c 00
                                  ret
                                         0xc
98:
       83 f8 01
                                  cmp
                                         eax,0x1
       74 04
9b:
                                  jе
                                         a1 <_FpuLogx@12+0xa1>
9d:
       d9 eb
                                  fldpi
9f:
       eb 13
                                  jmp
                                         b4 < FpuLogx@12+0xb4>
a1:
       83 f8 02
                                  cmp
                                         eax,0x2
a4:
       74 e9
                                  jе
                                         8f < FpuLogx@12+0x8f>
a6:
       d9 e8
                                  fld1
a8:
       d9 ea
                                  fldl2e
aa:
       d8 e1
                                  fsub
                                         st, st(1)
ac:
       d9 f0
                                  f2xm1
 ae:
       d8 c1
                                  fadd
                                         st, st(1)
b0:
       d9 fd
                                  fscale
b2:
       dd d9
                                  fstp
                                         st(1)
b4:
       d9 ec
                                  fldlg2
b6:
       d9 c9
                                  fxch
                                         st(1)
b8:
       d9 f1
                                  fyl2x
ba:
       9b df e0
                                  fstsw
                                         ax
bd:
       9b
                                  fwait
be:
       d0 e8
                                  shr
                                         al,1
 c0:
       72 cd
                                  jb
                                         8f < FpuLogx@12+0x8f>
 c2:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
                                         d0 < FpuLogx@12+0xd0>
 c9:
       74 05
                                  jе
 cb:
       db 7d 8a
                                  fstp
                                         TBYTE PTR [ebp-0x76]
 ce:
       eb 1f
                                  jmp
                                         ef < FpuLogx@12+0xef>
d0:
       8b 45 0c
                                  mov
                                         eax,DWORD PTR [ebp+0xc]
d3:
       f7 45
             10 00 00 10 00
                                  test
                                         DWORD PTR [ebp+0x10],0x100000
da:
       74 04
                                  jе
                                         e0 < FpuLogx@12+0xe0>
dc:
       d9
          18
                                  fstp
                                         DWORD PTR [eax]
de:
       eb 0f
                                  jmp
                                         ef <_FpuLogx@12+0xef>
e0:
       f7 45 10 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x10],0x200000
e7:
       74 04
                                  jе
                                         ed < FpuLogx@12+0xed>
e9:
       dd 18
                                  fstp
                                         QWORD PTR [eax]
eb:
       eb 02
                                  jmp
                                         ef <_FpuLogx@12+0xef>
ed:
       db 38
                                  fstp
                                         TBYTE PTR [eax]
                                  frstor [ebp-0x6c]
ef:
       dd 65 94
       f7 45 10 01 00 00 00
                                         DWORD PTR [ebp+0x10],0x1
 f2:
                                  test
 f9:
       74 02
                                  je
                                         fd <_FpuLogx@12+0xfd>
 fb:
       dd d8
                                  fstp
                                         st(0)
       f7 45 10 80 00 00 00
                                         DWORD PTR [ebp+0x10],0x80
fd:
                                  test
104:
       74 05
                                         10b < FpuLogx@12+0x10b>
                                  iе
106:
       dd c7
                                  ffree
                                         st(7)
108:
       db 6d 8a
                                  fld
                                         TBYTE PTR [ebp-0x76]
10b:
       0c 01
                                  or
                                         al,0x1
10d:
       c9
                                  leave
```

FpuLnx.obj: file format pe-i386

Disassembly of section .text:

c2 0c 00

10e:

1: 8b ec mov ebp,esp 3: 83 c4 88 add esp,0xffffff88 6: f7 45 10 01 00 00 00 test DWORD PTR [ebp+0x10],0x1

0xc

ebp

```
74 0d
 d:
                                 jе
                                         1c < FpuLnx@12+0x1c>
 f:
      d9 e5
                                 fxam
11:
      9b df e0
                                 fstsw
                                         ax
14:
      9b
                                 fwait
15:
      9e
                                 sahf
16:
      73 04
                                 jae
                                         1c < FpuLnx@12+0x1c>
18:
      7a 02
                                         1c < FpuLnx@12+0x1c>
                                 jр
1a:
      74 76
                                         92 < FpuLnx@12+0x92>
                                 jе
1c:
      9b dd 75 94
                                 fsave
                                         [ebp-0x6c]
20:
      f7 45
             10 01 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x1
27:
      74 0b
                                 jе
                                         34 < FpuLnx@12+0x34>
                                         eax, [ebp-0x6c]
29:
      8d 45
             94
                                 lea
2c:
      db 68 1c
                                 fld
                                         TBYTE PTR [eax+0x1c]
2f:
      e9 80 00
                00 00
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
34:
      8b 45 08
                                 mov
                                         eax, DWORD PTR [ebp+0x8]
37:
      f7 45
             10 10 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x10
3e:
      75
         58
                                 jne
                                         98 < FpuLnx@12+0x98>
40:
      f7 45
             10 02 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x2
47:
      74 04
                                 jе
                                         4d < FpuLnx@12+0x4d>
                                         TBYTE PTR [eax]
49:
      db 28
                                 fld
4b:
      eb 67
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
4d:
      f7 45
             10 00 00 02 00
                                 test
                                         DWORD PTR [ebp+0x10],0x20000
54:
      74 04
                                 jе
                                         5a < FpuLnx@12+0x5a>
56:
      dd 00
                                 fld
                                         QWORD PTR [eax]
                                         b4 < FpuLnx@12+0xb4>
58:
      eb 5a
                                 jmp
5a:
      f7 45
             10 00 00 01 00
                                 test
                                         DWORD PTR [ebp+0x10],0x10000
61:
      74 04
                                 jе
                                         67 < FpuLnx@12+0x67>
63:
      d9 00
                                 fld
                                         DWORD PTR [eax]
65:
      eb 4d
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
67:
      f7 45
             10 04 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x4
6e:
      74 04
                                 jе
                                         74 < FpuLnx@12+0x74>
70:
      db 00
                                 fild
                                         DWORD PTR [eax]
72:
      eb 40
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
74:
      f7 45
             10 00 00 00 01
                                 test
                                         DWORD PTR [ebp+0x10],0x1000000
7b:
      74 04
                                 jе
                                         81 < FpuLnx@12+0x81>
7d:
      df
         28
                                 fild
                                         QWORD PTR [eax]
7f:
      eb
         33
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
81:
      f7 45
             10 08 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x8
88:
      74 05
                                 jе
                                         8f < FpuLnx@12+0x8f>
8a:
      db 45 08
                                 fild
                                         DWORD PTR [ebp+0x8]
8d:
      eb 25
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
8f:
      dd 65 94
                                 frstor [ebp-0x6c]
92:
      33 c0
                                 xor
                                         eax,eax
94:
      c9
                                 leave
95:
      c2 0c 00
                                 ret
                                         0xc
98:
      83 f8 01
                                 cmp
                                         eax,0x1
9b:
      74 04
                                 jе
                                         a1 <_FpuLnx@12+0xa1>
9d:
      d9 eb
                                 fldpi
9f:
      eb 13
                                 jmp
                                         b4 < FpuLnx@12+0xb4>
      83 f8 02
a1:
                                 cmp
                                         eax,0x2
a4:
      74 e9
                                 jе
                                         8f < FpuLnx@12+0x8f >
                                 fld1
a6:
      d9 e8
                                 fldl2e
a8:
      d9 ea
aa:
      d8 e1
                                 fsub
                                         st, st(1)
ac:
      d9 f0
                                 f2xm1
ae:
      d8 c1
                                 fadd
                                         st, st(1)
b0:
      d9 fd
                                 fscale
b2:
      dd d9
                                 fstp
                                         st(1)
b4:
      d9 ed
                                 fldln2
b6:
      d9 c9
                                 fxch
                                         st(1)
b8:
      d9 f1
                                 fyl2x
ba:
      9b df e0
                                 fstsw
                                         ax
hd:
      9h
                                 fwait
be:
      d0 e8
                                 shr
                                         al,1
c0:
      72 cd
                                         8f < FpuLnx@12+0x8f>
                                 jb
c2:
      f7 45 10 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0\times10],0\times80
c9:
      74 05
                                 jе
                                         d0 < FpuLnx@12+0xd0>
                                 fstp
cb:
      db 7d 8a
                                         TBYTE PTR [ebp-0x76]
      eb 1f
                                         ef < FpuLnx@12+0xef>
ce:
                                 jmp
d0:
      8b 45 0c
                                         eax, DWORD PTR [ebp+0xc]
                                 mov
```

```
d3:
       f7 45 10 00 00 10 00
                                  test
                                         DWORD PTR [ebp+0x10],0x100000
da:
       74 04
                                  jе
                                         e0 < FpuLnx@12+0xe0>
dc:
       d9 18
                                  fstp
                                         DWORD PTR [eax]
de:
       eb 0f
                                  jmp
                                         ef < FpuLnx@12+0xef>
e0:
       f7 45 10 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x10],0x200000
e7:
       74 04
                                         ed < FpuLnx@12+0xed>
                                  jе
e9:
       dd 18
                                  fstp
                                         QWORD PTR [eax]
eb:
       eb 02
                                         ef < FpuLnx@12+0xef>
                                  jmp
ed:
       db 38
                                  fstp
                                         TBYTE PTR [eax]
ef:
       dd 65 94
                                  frstor [ebp-0x6c]
 f2:
       f7 45 10 01 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x1
 f9:
       74 02
                                  jе
                                         fd < FpuLnx@12+0xfd>
fb:
       dd d8
                                  fstp
                                         st(0)
fd:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
104:
       74 05
                                  jе
                                         10b < FpuLnx@12+0x10b>
106:
       dd c7
                                  ffree
                                         st(7)
                                         TBYTE PTR [ebp-0x76]
108:
       db 6d 8a
                                  fld
10b:
       0c 01
                                         al,0x1
10d:
       c9
                                  leave
10e:
       c2 0c 00
                                  ret
                                         0xc
```

FpuFLtoA.obj: file format pe-i386

```
00000000 < FpuFLtoA@16>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
        81 c4 54 ff ff ff
                                          esp,0xffffff54
   3:
                                   add
        8b 45 0c
   9:
                                   mov
                                          eax, DWORD PTR [ebp+0xc]
   c:
        f7 45 14 00 04 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x400
  13:
        74 02
                                   jе
                                          17 < FpuFLtoA@16+0x17>
  15:
        8b 00
                                   mov
                                          eax, DWORD PTR [eax]
  17:
        50
                                   push
                                          eax
  18:
        0f b6 c0
                                   movzx
                                          eax,al
  1b:
        83 f8 0f
                                   cmp
                                          eax,0xf
  1e:
        76 05
                                   jbe
                                          25 < FpuFLtoA@16+0x25>
  20:
        b8 0f 00 00 00
                                   mov
                                          eax,0xf
  25:
        89 45 f0
                                   mov
                                          DWORD PTR [ebp-0x10],eax
  28:
        58
                                   pop
                                          eax
  29:
        0f b6 c4
                                   movzx
                                          eax,ah
  2c:
        83 f8 11
                                   cmp
                                          eax,0x11
  2f:
        76 05
                                   jbe
                                          36 < FpuFLtoA@16+0x36>
  31:
        b8 11 00 00 00
                                   mov
                                          eax,0x11
  36:
        89 45 f4
                                   mov
                                          DWORD PTR [ebp-0xc],eax
  39:
        f7 45 14 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x1
  40:
        74 0d
                                   jе
                                          4f < FpuFLtoA@16+0x4f>
  42:
        d9 e5
                                   fxam
  44:
        9b df e0
                                   fstsw
                                          ax
  47:
        9b
                                   fwait
  48:
        9e
                                   sahf
  49:
        73 04
                                   jae
                                          4f < FpuFLtoA@16+0x4f>
 4b:
        7a 02
                                          4f < FpuFLtoA@16+0x4f>
                                   jр
 4d:
        74 42
                                          91 < FpuFLtoA@16+0x91>
                                   iе
 4f:
        9b dd 75 80
                                   fsave
                                          [ebp-0x80]
 53:
        f7 45 14 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x1
 5a:
        74 08
                                          64 < FpuFLtoA@16+0x64>
                                   jе
 5c:
        8d 45 80
                                   lea
                                          eax,[ebp-0x80]
 5f:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
 62:
        eb 44
                                   jmp
                                          a8 < FpuFLtoA@16+0xa8>
 64:
        8b 45 08
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
 67:
        f7 45 14 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0\times14],0\times2
 6e:
        74 04
                                          74 < FpuFLtoA@16+0x74>
                                   jе
                                          TBYTE PTR [eax]
  70:
        db 28
                                   fld
  72:
        eh 34
                                   jmp
                                          a8 < FpuFLtoA@16+0xa8>
        f7 45 14 00 00 02 00
  74:
                                   test
                                          DWORD PTR [ebp+0x14],0x20000
  7b:
        74 04
                                          81 < FpuFLtoA@16+0x81>
                                   jе
  7d:
        dd 00
                                   fld
                                          QWORD PTR [eax]
 7f:
        eb 27
                                          a8 < FpuFLtoA@16+0xa8>
                                   jmp
```

```
DWORD PTR [ebp+0x14],0x10000
81:
       f7 45 14 00 00 01 00
                                  test
       74 04
88:
                                  jе
                                          8e < FpuFLtoA@16+0x8e>
8a:
       d9 00
                                  fld
                                          DWORD PTR [eax]
8c:
       eb 1a
                                  jmp
                                          a8 < FpuFLtoA@16+0xa8>
8e:
       dd 65 80
                                  frstor [ebp-0x80]
91:
       57
                                  push
92:
       8b 7d 10
                                          edi,DWORD PTR [ebp+0x10]
                                  mov
95:
       b8 45 52 52 4f
                                          eax,0x4f525245
                                  mov
9a:
                                          DWORD PTR es:[edi],eax
                                  stos
9b:
       66 b8 52 00
                                  mov
                                          ax,0x52
9f:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
a1:
       5f
                                  pop
a2:
       33 c0
                                  xor
                                          eax,eax
a4:
       c9
                                  leave
a5:
       c2 10 00
                                  ret
                                          0x10
a8:
       d9 e5
                                  fxam
aa:
       9b df e0
                                  fstsw
                                          ax
ad:
       9b
                                  fwait
ae:
       9e
                                  sahf
       74 25
 af:
                                  jе
                                          d6 < FpuFLtoA@16+0xd6>
b1:
       7b db
                                  jnp
                                          8e < FpuFLtoA@16+0x8e>
b3:
       73 4b
                                  jae
                                          100 < FpuFLtoA@16+0x100>
b5:
       51
                                  push
                                          ecx
b6:
       56
                                  push
b7:
       57
                                  push
                                          edi
b8:
       8b 7d 10
                                  mov
                                          edi, DWORD PTR [ebp+0x10]
bb:
       b0 2b
                                  mov
                                          al,0x2b
bd:
       f6 c4 02
                                  test
                                          ah,0x2
 c0:
       74 02
                                  jе
                                          c4 < FpuFLtoA@16+0xc4>
 c2:
       b0 2d
                                  mov
                                          al,0x2d
 c4:
       aa
                                  stos
                                          BYTE PTR es:[edi],al
 c5:
       b8 49 4e 46 49
                                  mov
                                          eax,0x49464e49
 ca:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
 cb:
       b8 4e 49 54 59
                                  mov
                                          eax,0x5954494e
d0:
       ab
                                  stos
                                          DWORD PTR es:[edi],eax
d1:
       e9 0d 02 00 00
                                  jmp
                                          2e3 < FpuFLtoA@16+0x2e3>
d6:
       7a 28
                                          100 < FpuFLtoA@16+0x100>
                                  ĺΩ
d8:
       dd d8
                                  fstp
                                          st(0)
da:
       51
                                  push
                                          ecx
db:
       56
                                  push
                                          esi
dc:
       57
                                  push
                                          edi
dd:
       8b 7d 10
                                  mov
                                          edi, DWORD PTR [ebp+0x10]
e0:
       f7 45 14 00 80 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x8000
e7:
       75 0c
                                  jne
                                          f5 < FpuFLtoA@16+0xf5>
e9:
       8b 4d f4
                                  mov
                                          ecx,DWORD PTR [ebp-0xc]
ec:
       83 e9 02
                                  sub
                                          ecx,0x2
ef:
       7e 04
                                  jle
                                          f5 <_FpuFLtoA@16+0xf5>
 f1:
       b0 20
                                  mov
                                          al,0x20
 f3:
       f3 aa
                                  rep stos BYTE PTR es:[edi],al
 f5:
       66 b8 20 30
                                  mov
                                          ax,0x3020
f9:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
fb:
       e9 e3 01 00 00
                                  jmp
                                          2e3 <_FpuFLtoA@16+0x2e3>
100:
       d9 ec
                                  fldlg2
102:
       d9 c1
                                  fld
                                          st(1)
104:
       d9 e1
                                  fabs
                                  fyl2x
106:
       d9 f1
108:
       9b d9 bd 6a ff ff ff
                                  fstcw
                                         WORD PTR [ebp-0x96]
10f:
       9b
                                  fwait
110:
       66 8b 85 6a ff ff ff
                                  mov
                                          ax, WORD PTR [ebp-0x96]
117:
       66 0d 00 0c
                                          ax,0xc00
                                  or
11b:
       66 89 85 68 ff ff ff
                                  mov
                                          WORD PTR [ebp-0x98],ax
122:
       d9 ad 68 ff ff ff
                                  fldcw
                                          WORD PTR [ebp-0x98]
                                          DWORD PTR [ebp-0x8]
128:
       db 55 f8
                                  fist
12b:
       d9 ad 6a ff ff ff
                                  fldcw
                                         WORD PTR [ebp-0x96]
131:
       d9 e4
                                  ftst
133:
       9b df e0
                                  fstsw
                                          ax
136:
       9h
                                  fwait
137:
       96
                                  sahf
138:
       83 5d f8 00
                                  sbb
                                          DWORD PTR [ebp-0x8],0x0
13c:
       dd d8
                                  fstp
                                          st(0)
```

```
8b 45 14
13e:
                                  mov
                                          eax, DWORD PTR [ebp+0x14]
141:
       25 00 80 00 00
                                  and
                                          eax,0x8000
146:
       c7 45 ec 00 00 00 00
                                  mov
                                          DWORD PTR [ebp-0x14],0x0
14d:
       0b c0
                                  or
                                          eax,eax
14f:
       75 32
                                  jne
                                          183 < FpuFLtoA@16+0x183>
151:
       8b 45 f8
                                  mov
                                          eax,DWORD PTR [ebp-0x8]
154:
       0b c0
                                  or
                                          eax,eax
156:
       78 23
                                          17b < FpuFLtoA@16+0x17b>
                                  js
158:
       83 f8 0f
                                  cmp
                                          eax,0xf
15b:
       76 10
                                  jbe
                                          16d < FpuFLtoA@16+0x16d>
                                          DWORD PTR [ebp+0x14],0x8000
15d:
       81 4d 14 00 80 00 00
                                  or
164:
       c7 45 f0 0f 00 00 00
                                  mov
                                          DWORD PTR [ebp-0x10],0xf
16b:
       eb 16
                                  jmp
                                          183 < FpuFLtoA@16+0x183>
16d:
       03 45 f0
                                  add
                                          eax, DWORD PTR [ebp-0x10]
       83 f8 0f
170:
                                  cmp
                                          eax,0xf
173:
       76 06
                                  jbe
                                          17b < FpuFLtoA@16+0x17b>
175:
       83 e8 0f
                                  sub
                                          eax,0xf
178:
       29 45 f0
                                  sub
                                          DWORD PTR [ebp-0x10],eax
       ff 75 f0
17b:
                                  push
                                          DWORD PTR [ebp-0x10]
17e:
       8f 45 fc
                                  pop
                                          DWORD PTR [ebp-0x4]
181:
       eb 1b
                                  jmp
                                          19e < FpuFLtoA@16+0x19e>
183:
       8b 45 f0
                                  mov
                                          eax, DWORD PTR [ebp-0x10]
186:
       2b 45 f8
                                  sub
                                          eax, DWORD PTR [ebp-0x8]
189:
       3d 43 13 00 00
                                  cmp
                                          eax, 0x1343
18e:
       7e 0b
                                  jle
                                          19b < FpuFLtoA@16+0x19b>
190:
       b9 43 13 00 00
                                  mov
                                          ecx,0x1343
195:
       2b c1
                                  sub
                                          eax, ecx
197:
       91
                                  xchq
                                          ecx, eax
198:
       89 4d ec
                                  mov
                                          DWORD PTR [ebp-0x14],ecx
       89 45 fc
                                          DWORD PTR [ebp-0x4],eax
19b:
                                  mov
19e:
       83 7d fc 00
                                  cmp
                                          DWORD PTR [ebp-0x4],0x0
1a2:
       74 3c
                                  jе
                                          1e0 < FpuFLtoA@16+0x1e0>
1a4:
       db 45 fc
                                  fild
                                          DWORD PTR [ebp-0x4]
1a7:
       d9 e9
                                  fldl2t
1a9:
       de c9
                                  fmulp
                                          st(1),st
1ab:
       d9 c0
                                  fld
                                          st(0)
1ad:
       d9 fc
                                  frndint
       d9 c9
laf:
                                  fxch
                                          st(1)
1b1:
       d8 e1
                                  fsub
                                          st, st(1)
1b3:
       d9 f0
                                  f2xm1
1b5:
       d9 e8
                                  fld1
1b7:
       de c1
                                  faddp
                                          st(1),st
1b9:
       d9 fd
                                  fscale
1bb:
       dd d9
                                  fstp
                                          st(1)
1bd:
       de c9
                                  fmulp
                                          st(1), st
1bf:
       83 7d ec 00
                                  cmp
                                          DWORD PTR [ebp-0x14],0x0
1c3:
       74 1b
                                  jе
                                          1e0 < FpuFLtoA@16+0x1e0>
1c5:
       db 45 ec
                                  fild
                                          DWORD PTR [ebp-0x14]
1c8:
       d9 e9
                                  fldl2t
1ca:
       de c9
                                  fmulp
                                          st(1), st
       d9 c0
1cc:
                                  fld
                                          st(0)
       d9 fc
1ce:
                                  frndint
1d0:
       d9 c9
                                  fxch
                                          st(1)
1d2:
       d8 e1
                                  fsub
                                          st, st(1)
1d4:
       d9 f0
                                  f2xm1
1d6:
       d9 e8
                                  fld1
                                  faddp
1d8:
       de c1
                                          st(1),st
1da:
       d9 fd
                                  fscale
1dc:
       dd d9
                                  fstp
                                          st(1)
                                  fmulp
1de:
       de c9
                                          st(1),st
                                  fbstp
1e0:
       df b5 6c ff ff ff
                                          TBYTE PTR [ebp-0x94]
1e6:
       9b df e0
                                  fstsw
1e9:
       9h
                                  fwait
1ea:
       d1 e8
                                  shr
                                          eax,1
lec:
       Of 82 9c fe ff ff
                                          8e < FpuFLtoA@16+0x8e>
                                  jb
1f2:
       51
                                  push
                                          ecx
1f3:
       56
                                          esi
                                  push
1f4:
       57
                                  push
                                          edi
       8d b5 75 ff ff ff
1f5:
                                  lea
                                          esi,[ebp-0x8b]
1fb:
       8d bd 54 ff ff ff
                                  lea
                                          edi,[ebp-0xac]
```

```
201:
       b8 20 30 00 00
                                  mov
                                          eax,0x3020
206:
       8a 0e
                                  mov
                                          cl,BYTE PTR [esi]
208:
       80 f9 80
                                  cmp
                                          cl,0x80
20b:
       75 02
                                  jne
                                          20f < FpuFLtoA@16+0x20f>
20d:
       b0 2d
                                          al,0x2d
                                  mov
20f:
       66 ab
                                          WORD PTR es:[edi],ax
                                  stos
211:
       b9 09 00 00 00
                                          ecx,0x9
                                  mov
216:
       4e
                                  dec
217:
       0f b6 06
                                          eax,BYTE PTR [esi]
                                  movzx
21a:
       66 c1 c8 04
                                          ax,0x4
                                  ror
21e:
       c0 cc 04
                                  ror
                                          ah,0x4
221:
       66 05 30 30
                                  add
                                          ax,0x3030
225:
       66 ab
                                  stos
                                          WORD PTR es:[edi],ax
227:
       49
                                  dec
                                          ecx
228:
       75 ec
                                  jne
                                          216 < FpuFLtoA@16+0x216>
22a:
       8b 7d 10
                                  mov
                                          edi,DWORD PTR [ebp+0x10]
22d:
       8d b5 54 ff ff ff
                                  lea
                                          esi,[ebp-0xac]
233:
       f7 45 14 00 80 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x8000
23a:
       75 55
                                  jne
                                          291 < FpuFLtoA@16+0x291>
23c:
       8b 4d f4
                                  mov
                                          ecx, DWORD PTR [ebp-0xc]
23f:
       0b c9
                                  or
                                          ecx,ecx
241:
       74 16
                                  jе
                                          259 < FpuFLtoA@16+0x259>
243:
       ba 02 00 00 00
                                  mov
                                          edx,0x2
248:
       8b 45 f8
                                  mov
                                          eax, DWORD PTR [ebp-0x8]
24b:
       0b c0
                                  or
                                          eax,eax
24d:
       78 02
                                  js
                                          251 < FpuFLtoA@16+0x251>
24f:
       03 d0
                                  add
                                          edx,eax
251:
       2b ca
                                  sub
                                          ecx,edx
253:
       7e 04
                                  jle
                                          259 < FpuFLtoA@16+0x259>
255:
       b0 20
                                  mov
                                          al,0x20
257:
       f3 aa
                                  rep stos BYTE PTR es:[edi],al
259:
       9c
                                  pushf
25a:
       a4
                                  movs
                                          BYTE PTR es:[edi],BYTE PTR ds:[esi]
25b:
       b9 01 00 00 00
                                  mov
                                          ecx,0x1
260:
       8b 45 f8
                                  mov
                                          eax, DWORD PTR [ebp-0x8]
       0b c0
263:
                                  or
                                          eax,eax
                                          269 < FpuFLtoA@16+0x269>
265:
       78 02
                                  js
267:
       03 c8
                                  add
                                          ecx, eax
269:
       8b 45 f0
                                  mov
                                          eax, DWORD PTR [ebp-0x10]
26c:
       03 c1
                                  add
                                          eax, ecx
26e:
       83 e8 13
                                  sub
                                          eax,0x13
       2b f0
271:
                                  sub
                                          esi,eax
273:
       58
                                  pop
                                          eax
274:
       80 7e ff 31
                                  cmp
                                          BYTE PTR [esi-0x1],0x31
278:
       75 07
                                  jne
                                          281 < FpuFLtoA@16+0x281>
27a:
       4e
                                  dec
                                          esi
27b:
       41
                                  inc
                                          ecx
27c:
       50
                                  push
                                          eax
27d:
       9d
                                  popf
                                  jle
27e:
       7e 01
                                          281 < FpuFLtoA@16+0x281>
280:
       4f
                                  dec
                                          edi
                                  rep movs BYTE PTR es:[edi],BYTE PTR ds:[esi]
281:
       f3 a4
283:
       8b 4d f0
                                  mov
                                          ecx, DWORD PTR [ebp-0x10]
286:
       0b c9
                                  or
                                          ecx,ecx
288:
       74 05
                                          28f < FpuFLtoA@16+0x28f>
                                  jе
                                          al,0x2e
28a:
       b0 2e
                                  mov
28c:
                                  stos
                                          BYTE PTR es:[edi],al
       aa
28d:
       f3 a4
                                  rep movs BYTE PTR es:[edi],BYTE PTR ds:[esi]
                                          2e3 < FpuFLtoA@16+0x2e3>
28f:
       eb 52
                                  jmp
291:
       a4
                                          BYTE PTR es:[edi],BYTE PTR ds:[esi]
                                  movs
292:
       8b 4d f0
                                  mov
                                          ecx, DWORD PTR [ebp-0x10]
295:
       b8 12 00 00 00
                                          eax,0x12
                                  mov
29a:
       2h c1
                                  sub
                                          eax,ecx
29c:
       03 f0
                                  add
                                          esi,eax
       80 7e ff 31
29e:
                                          BYTE PTR [esi-0x1],0x31
                                  cmp
2a2:
       9c
                                  pushf
2a3:
       75 01
                                  jne
                                          2a6 < FpuFLtoA@16+0x2a6>
2a5:
       4e
                                  dec
                                          esi
2a6:
       а4
                                          BYTE PTR es:[edi],BYTE PTR ds:[esi]
                                  movs
2a7:
       b0 2e
                                          al,0x2e
                                  mov
```

```
2a9:
       aa
                                   stos
                                          BYTE PTR es:[edi],al
2aa:
       f3 a4
                                   rep movs BYTE PTR es:[edi],BYTE PTR ds:[esi]
2ac:
       b0 45
                                          al,0x45
2ae:
                                   stos
                                          BYTE PTR es:[edi],al
       aa
2af:
       b0 2b
                                   mov
                                          al,0x2b
2b1:
       8b 4d f8
                                   mov
                                          ecx,DWORD PTR [ebp-0x8]
2b4:
       9d
                                   popf
2b5:
       75 01
                                   jne
                                          2b8 < FpuFLtoA@16+0x2b8>
2b7:
       41
                                   inc
                                          ecx
2b8:
       0b c9
                                   or
                                          ecx,ecx
2ba:
       79 04
                                   jns
                                          2c0 < FpuFLtoA@16+0x2c0>
2bc:
       b0 2d
                                   mov
                                          al,0x2d
2be:
       f7 d9
                                   neg
                                          ecx
2c0:
       aa
                                   stos
                                          BYTE PTR es:[edi],al
2c1:
       8b c1
                                   mov
                                          eax,ecx
2c3:
       b1 64
                                   mov
                                          cl,0x64
2c5:
       f6 f1
                                   div
                                          cl
2c7:
       50
                                   push
                                          eax
       25 ff 00 00 00
2c8:
                                   and
                                          eax,0xff
2cd:
       b1 0a
                                   mov
                                          cl,0xa
2cf:
       f6 f1
                                   div
                                          cl
2d1:
       66 05 30 30
                                   add
                                          ax,0x3030
2d5:
       66 ab
                                   stos
                                          WORD PTR es:[edi],ax
2d7:
       58
                                   pop
                                          eax
2d8:
       c1 e8 08
                                   shr
                                          eax,0x8
2db:
       f6 f1
                                   div
                                          сl
2dd:
       66 05 30 30
                                   add
                                          ax,0x3030
2e1:
       66 ab
                                   stos
                                          WORD PTR es:[edi],ax
2e3:
       33 c0
                                   xor
                                          eax, eax
2e5:
       aa
                                   stos
                                          BYTE PTR es:[edi],al
2e6:
       5f
                                   pop
                                          edi
2e7:
       5e
                                   pop
                                          esi
2e8:
       59
                                   pop
                                          ecx
2e9:
       dd 65 80
                                   frstor [ebp-0x80]
2ec:
       0c 01
                                   or
                                          al,0x1
       c9
2ee:
                                   leave
2ef:
       c2 10 00
                                          0x10
```

FpuExam.obj: file format pe-i386

```
00000000 < FpuExam@8>:
   0:
        55
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
   3:
        83 c4 94
                                   add
                                          esp,0xffffff94
   6:
        52
                                   push
                                          edx
   7:
                                          DWORD PTR [ebp+0xc],0x1
        f7 45 0c 01 00 00 00
                                   test
        74 0d
   e:
                                   je
                                          1d < FpuExam@8+0x1d>
  10:
        d9 e5
                                   fxam
  12:
        9b df e0
                                   fstsw
                                          ax
  15:
        9b
                                   fwait
  16:
        9e
                                   sahf
                                   jae
                                          1d <_FpuExam@8+0x1d>
  17:
        73 04
  19:
        7a 02
                                          1d < FpuExam@8+0x1d>
                                   jр
  1b:
        74 42
                                   jе
                                          5f < FpuExam@8+0x5f>
  1d:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  21:
        f7 45 0c 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0xc],0x1
  28:
        74 08
                                          32 < FpuExam@8+0x32>
                                   jе
                                          eax, [ebp-0x6c]
  2a:
        8d 45 94
                                   lea
  2d:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  30:
        eb 34
                                   jmp
                                          66 < FpuExam@8+0x66>
        8b 45 08
  32:
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
  35:
        f7 45 0c 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0xc],0x2
  3c:
        74 04
                                   jе
                                          42 < FpuExam@8+0x42>
                                          TBYTE PTR [eax]
  3e:
        db 28
                                   fld
  40:
        eh 24
                                          66 < FpuExam@8+0x66>
                                   jmp
  42:
        f7 45 0c 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0xc],0x20000
  49:
        74 04
                                          4f < FpuExam@8+0x4f>
                                   jе
```

```
QWORD PTR [eax]
      dd 00
4b:
                                  fld
4d:
      eb 17
                                  jmp
                                         66 < FpuExam@8+0x66>
4f:
      f7 45 0c 00 00 01 00
                                  test
                                         DWORD PTR [ebp+0xc], 0x10000
56:
      74 04
                                  jе
                                         5c < FpuExam@8+0x5c>
58:
      d9 00
                                  fld
                                         DWORD PTR [eax]
5a:
      eb 0a
                                  jmp
                                         66 < FpuExam@8+0x66>
5c:
      dd 65 94
                                  frstor [ebp-0x6c]
5f:
      33 c0
                                  xor
                                         eax,eax
61:
      5a
                                  pop
                                         edx
62:
      c9
                                  leave
63:
      c2 08 00
                                  ret
                                         0x8
66:
      d9 e4
                                  ftst
68:
      9b df e0
                                  fstsw
                                         ax
6b:
      9b
                                  fwait
6c:
      d0 e8
                                  shr
                                         al,1
6e:
      72 ec
                                  jЬ
                                         5c < FpuExam@8+0x5c>
70:
      33 d2
                                 xor
                                         edx,edx
72:
      9e
                                  sahf
73:
      75 07
                                  jne
                                         7c < FpuExam@8+0x7c>
75:
                                         9f < FpuExam@8+0x9f>
      72 28
                                  jЬ
77:
      83 ca 0a
                                  or
                                         edx,0xa
7a:
      eb 17
                                  jmp
                                         93 < FpuExam@8+0x93>
                                         81 < FpuExam@8+0x81>
7c:
      73 03
                                  jae
7e:
      83 ca 04
                                  or
                                         edx,0x4
81:
      d9 e1
                                  fabs
83:
      d9 e8
                                  fld1
85:
      de d9
                                  fcompp
87:
      9b df e0
                                  fstsw
                                         ax
8a:
      9b
                                  fwait
8b:
      9e
                                  sahf
8c:
      72 05
                                  jb
                                         93 < FpuExam@8+0x93>
                                         93 < FpuExam@8+0x93>
8e:
      74 03
                                  jе
90:
      83 ca 08
                                 or
                                         edx,0x8
93:
      dd 65 94
                                  frstor [ebp-0x6c]
96:
      8b c2
                                 mov
                                         eax,edx
98:
      0c 01
                                  or
                                         al,0x1
9a:
      5a
                                  pop
                                         edx
9b:
      c9
                                  leave
9c:
      c2 08 00
                                  ret
                                         0x8
9f:
      d9 e5
                                  fxam
a1:
      9b df e0
                                  fstsw
                                         ax
a4:
      9b
                                  fwait
a5:
      9e
                                  sahf
a6:
      7b b4
                                  jnp
                                         5c < FpuExam@8+0x5c>
a8:
      83 ca 10
                                 or
                                         edx,0x10
ab:
      eb e6
                                  jmp
                                         93 < FpuExam@8+0x93>
```

FpuEexpX.obj: file format pe-i386

```
00000000 <_FpuEexpX@12>:
   0:
        55
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
                                          esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   ie
                                          1c < FpuEexpX@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuEexpX@12+0x1c>
  18:
        7a 02
                                          1c < FpuEexpX@12+0x1c>
                                   jp
  1a:
        74 76
                                          92 < FpuEexpX@12+0x92>
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 0b
                                          34 <_FpuEexpX@12+0x34>
                                   jе
                                          eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
```

```
2f:
      e9 80 00 00 00
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
                                         eax, DWORD PTR [ebp+0x8]
34:
      8b 45 08
                                 mov
                                         DWORD PTR [ebp+0\times10],0\times10
37:
      f7 45 10 10 00 00 00
                                 test
3e:
      75 58
                                 jne
                                         98 < FpuEexpX@12+0x98>
40:
      f7 45 10 02 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x2
47:
      74 04
                                 jе
                                         4d < FpuEexpX@12+0x4d>
                                         TBYTE PTR [eax]
49:
      db 28
                                 fld
4b:
      eb 67
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
4d:
      f7 45
             10 00 00 02 00
                                 test
                                         DWORD PTR [ebp+0x10],0x20000
54:
      74 04
                                         5a < FpuEexpX@12+0x5a>
                                 jе
56:
      dd 00
                                 fld
                                         QWORD PTR [eax]
58:
      eb 5a
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
5a:
      f7 45
             10 00 00 01 00
                                 test
                                         DWORD PTR [ebp+0x10],0x10000
61:
      74 04
                                 jе
                                         67 < FpuEexpX@12+0x67>
63:
      d9
         00
                                 fld
                                         DWORD PTR [eax]
65:
      eb 4d
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
67:
      f7 45
             10 04 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x4
6e:
      74 04
                                 jе
                                         74 < FpuEexpX@12+0x74>
                                         DWORD PTR [eax]
70:
      db 00
                                 fild
72:
      eb 40
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
74:
      f7 45
             10 00 00 00 01
                                 test
                                         DWORD PTR [ebp+0x10],0x1000000
7b:
      74 04
                                 jе
                                         81 < FpuEexpX@12+0x81>
7d:
      df
         28
                                 fild
                                         QWORD PTR [eax]
7f:
      eb 33
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
81:
      f7 45 10 08 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x8
88:
      74 05
                                 jе
                                         8f < FpuEexpX@12+0x8f>
8a:
      db 45 08
                                 fild
                                         DWORD PTR [ebp+0x8]
8d:
      eb 25
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
8f:
      dd 65 94
                                 frstor [ebp-0x6c]
92:
      33 c0
                                 xor
                                         eax, eax
94:
      c9
                                 leave
95:
      c2 0c 00
                                 ret
                                         0xc
98:
      83 f8 01
                                 cmp
                                         eax,0x1
9b:
      74 04
                                 jе
                                         a1 < FpuEexpX@12+0xa1>
9d:
      d9 eb
                                 fldpi
9f:
      eb 13
                                 jmp
                                         b4 < FpuEexpX@12+0xb4>
a1:
      83 f8 02
                                 cmp
                                         eax,0x2
a4:
      74 e9
                                 jе
                                         8f < FpuEexpX@12+0x8f>
a6:
      d9 e8
                                 fld1
      d9 ea
a8:
                                 fldl2e
aa:
      d8 e1
                                 fsub
                                         st, st(1)
ac:
      d9 f0
                                 f2xm1
ae:
      d8 c1
                                 fadd
                                         st, st(1)
b0:
      d9 fd
                                 fscale
b2:
      dd d9
                                 fstp
                                         st(1)
b4:
      d9 ea
                                 fldl2e
b6:
      de c9
                                 fmulp
                                         st(1),st
b8:
      d9 c0
                                 fld
                                         st(0)
      d9 fc
ba:
                                 frndint
bc:
      dc e9
                                 fsubr
                                         st(1),st
be:
      d9 c9
                                 fxch
                                         st(1)
      d9 f0
c0:
                                 f2xm1
c2:
      d9 e8
                                 fld1
                                 faddp
c4:
      de c1
                                         st(1), st
c6:
      d9 fd
                                 fscale
c8:
      9b df e0
                                 fstsw
                                         ax
cb:
      9b
                                 fwait
cc:
      d0 e8
                                 shr
                                         al,1
ce:
      72 bf
                                 jb
                                         8f <_FpuEexpX@12+0x8f>
                                 fstp
d0:
      dd d9
                                         st(1)
d2:
      f7 45 10 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0\times10],0\times80
d9:
      74 05
                                         e0 < FpuEexpX@12+0xe0>
                                 jе
                                 fstp
db:
      db 7d 8a
                                         TBYTE PTR [ebp-0x76]
                                         ff < FpuEexpX@12+0xff>
de:
      eb 1f
                                 jmp
      8b 45 0c
e0:
                                 mov
                                         eax, DWORD PTR [ebp+0xc]
e3:
      f7 45
             10 00 00 10 00
                                 test
                                         DWORD PTR [ebp+0x10],0x100000
ea:
      74 04
                                         f0 < FpuEexpX@12+0xf0>
                                 jе
      d9 18
                                 fstp
                                         DWORD PTR [eax]
ec:
      eb 0f
                                         ff < FpuEexpX@12+0xff>
ee:
                                 jmp
f0:
      f7 45 10 00 00 20 00
                                 test
                                         DWORD PTR [ebp+0x10],0x200000
```

```
f7:
       74 04
                                  jе
                                         fd < FpuEexpX@12+0xfd>
                                  fstp
 f9:
       dd 18
                                         QWORD PTR [eax]
 fb:
       eb 02
                                  jmp
                                         ff < FpuEexpX@12+0xff>
fd:
       db 38
                                  fstp
                                         TBYTE PTR [eax]
ff:
       dd 65 94
                                  frstor [ebp-0x6c]
102:
       f7 45 10 01 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x1
109:
       74 02
                                  jе
                                         10d < FpuEexpX@12+0x10d>
10b:
       dd d8
                                  fstp
                                         st(0)
                                         DWORD PTR [ebp+0x10],0x80
10d:
       f7 45 10 80 00 00 00
                                  test
114:
       74 05
                                         11b < FpuEexpX@12+0x11b>
                                  jе
116:
       dd c7
                                  ffree
                                         st(7)
                                         TBYTE PTR [ebp-0x76]
118:
       db 6d 8a
                                  fld
11b:
       0c 01
                                         al,0x1
11d:
       c9
                                  leave
11e:
       c2 0c 00
                                  ret
                                         0xc
```

FpuDiv.obj: file format pe-i386

```
00000000 < FpuDiv@16>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 14 01 01 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x101
   d:
        74 0d
                                   jе
                                          1c < FpuDiv@16+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuDiv@16+0x1c>
  18:
        7a 02
                                   jр
                                          1c < FpuDiv@16+0x1c>
  1a:
        74 76
                                   jе
                                          92 < FpuDiv@16+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 14 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x1
  27:
        74 0b
                                   jе
                                          34 <_FpuDiv@16+0x34>
                                          eax,[ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        e9 80 00 00 00
                                   jmp
                                          b4 < FpuDiv@16+0xb4>
  34:
        8b 45 08
                                   mov
                                          eax,DWORD PTR [ebp+0x8]
  37:
        f7 45
              14 10 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x10
  3e:
        75 58
                                   jne
                                          98 < FpuDiv@16+0x98>
  40:
        f7 45 14 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x2
                                          4d < FpuDiv@16+0x4d>
  47:
        74 04
                                   jе
  49:
        db 28
                                   fld
                                          TBYTE PTR [eax]
                                          b4 <_FpuDiv@16+0xb4>
  4b:
        eb 67
                                   jmp
  4d:
        f7 45 14 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x14],0x20000
  54:
        74 04
                                   jе
                                          5a < FpuDiv@16+0x5a>
        dd 00
                                   fld
                                          QWORD PTR [eax]
  56:
  58:
        eb 5a
                                   jmp
                                          b4 < FpuDiv@16+0xb4>
        f7 45 14 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x14],0x10000
  5a:
        74 04
  61:
                                   jе
                                          67 <_FpuDiv@16+0x67>
  63:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  65:
        eb 4d
                                   jmp
                                          b4 < FpuDiv@16+0xb4>
  67:
        f7 45 14 04 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x4
  6e:
        74 04
                                          74 < FpuDiv@16+0x74>
                                   jе
  70:
        db 00
                                   fild
                                          DWORD PTR [eax]
  72:
        eb 40
                                   jmp
                                          b4 < FpuDiv@16+0xb4>
  74:
        f7 45 14 00 00 00 01
                                   test
                                          DWORD PTR [ebp+0x14],0x1000000
  7b:
        74 04
                                          81 < FpuDiv@16+0x81>
                                   jе
  7d:
        df 28
                                   fild
                                          QWORD PTR [eax]
  7f:
        eh 33
                                   jmp
                                          b4 < FpuDiv@16+0xb4>
  81:
        f7 45 14 08 00 00 00
                                   test
                                          DWORD PTR [ebp+0x14],0x8
  88:
        74 05
                                          8f < FpuDiv@16+0x8f>
                                   jе
  8a:
        db 45 08
                                   fild
                                          DWORD PTR [ebp+0x8]
  8d:
        eb 25
                                   jmp
                                          b4 < FpuDiv@16+0xb4>
  8f:
        dd 65 94
                                   frstor [ebp-0x6c]
        33 c0
  92:
                                   xor
                                          eax, eax
  94:
        c9
                                   leave
```

```
95:
       c2 10 00
                                  ret
                                          0x10
 98:
       83 f8 01
                                  cmp
                                          eax,0x1
       75 04
 9b:
                                  jne
                                          a1 < FpuDiv@16+0xa1>
 9d:
       d9 eb
                                  fldpi
 9f:
       eb 13
                                  jmp
                                          b4 < FpuDiv@16+0xb4>
 a1:
       83 f8 02
                                  cmp
                                          eax,0x2
 a4:
       75 e9
                                  jne
                                          8f < FpuDiv@16+0x8f>
 a6:
       d9 e8
                                  fld1
 a8:
       d9 ea
                                  fldl2e
       d8 e1
                                  fsub
                                          st, st(1)
 aa:
 ac:
       d9 f0
                                  f2xm1
 ae:
       d8 c1
                                  fadd
                                          st, st(1)
 b0:
       d9 fd
                                  fscale
 b2:
       dd d9
                                  fstp
                                          st(1)
 b4:
       f7 45
              14 00 01 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x100
 bb:
       74 0b
                                  jе
                                          c8 < FpuDiv@16+0xc8>
                                          eax, [ebp-0x6c]
 bd:
       8d 45 94
                                  lea
 c0:
       db 68 1c
                                  fld
                                          TBYTE PTR [eax+0x1c]
 c3:
       e9 80 00 00 00
                                  jmp
                                          148 < FpuDiv@16+0x148>
 c8:
       8b 45 0c
                                  mov
                                          eax, DWORD PTR [ebp+0xc]
 cb:
       f7 45 14 00 10 00 00
                                  test
                                          DWORD PTR [ebp+0x14],0x1000
                                  jne
 d2:
       75
          54
                                          128 < FpuDiv@16+0x128>
                                          DWORD PTR [ebp+0x14],0x200
 d4:
       f7 45 14 00 02 00 00
                                  test
 db:
       74 04
                                  jе
                                          e1 < FpuDiv@16+0xe1>
                                          TBYTE PTR [eax]
 dd:
       db 28
                                  fld
 df:
       eb 67
                                  jmp
                                          148 < FpuDiv@16+0x148>
                                          DWORD PTR [ebp+0x14],0x80000
 e1:
       f7 45
              14 00 00 08 00
                                  test
 e8:
       74 04
                                  jе
                                          ee < FpuDiv@16+0xee>
 ea:
       dd 00
                                  fld
                                          QWORD PTR [eax]
       eb 5a
 ec:
                                  jmp
                                          148 < FpuDiv@16+0x148>
                                          DWORD PTR [ebp+0x14], 0x40000
 ee:
       f7 45
              14 00 00 04 00
                                  test
 f5:
       74 04
                                  jе
                                          fb < FpuDiv@16+0xfb>
 f7:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 f9:
       eb 4d
                                  jmp
                                          148 < FpuDiv@16+0x148>
 fb:
       f7 45
              14 00 04 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times400
                                          108 < FpuDiv@16+0x108>
102:
       74 04
                                  jе
                                          DWORD PTR [eax]
104:
       db 00
                                  fild
                                          148 <_FpuDiv@16+0x148>
106:
       eb 40
                                  jmp
108:
       f7 45
              14 00 00 00 02
                                  test
                                          DWORD PTR [ebp+0x14],0x2000000
10f:
       74 04
                                  jе
                                          115 < FpuDiv@16+0x115>
111:
       df
          28
                                  fild
                                          QWORD PTR [eax]
113:
       eb 33
                                  jmp
                                          148 < FpuDiv@16+0x148>
115:
       f7 45 14 00 08 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times800
11c:
       74 05
                                  jе
                                          123 < FpuDiv@16+0x123>
11e:
       db 45 0c
                                  fild
                                          DWORD PTR [ebp+0xc]
121:
       eb 25
                                  jmp
                                          148 < FpuDiv@16+0x148>
123:
       e9 67 ff ff ff
                                  jmp
                                          8f < FpuDiv@16+0x8f>
128:
       83 f8 01
                                  cmp
                                          eax,0x1
12b:
       75 04
                                  ine
                                          131 <_FpuDiv@16+0x131>
12d:
       d9 eb
                                  fldpi
12f:
       eb 17
                                  jmp
                                          148 < FpuDiv@16+0x148>
131:
       83 f8 02
                                  cmp
                                          eax,0x2
       0f 85 55 ff ff ff
134:
                                  jne
                                          8f < FpuDiv@16+0x8f >
13a:
       d9 e8
                                  fld1
13c:
       d9 ea
                                  fldl2e
13e:
       d8 e1
                                  fsub
                                          st, st(1)
140:
       d9 f0
                                  f2xm1
142:
       d8 c1
                                  fadd
                                          st, st(1)
144:
       d9 fd
                                  fscale
146:
       dd d9
                                  fstp
                                          st(1)
148:
       de f9
                                  fdivrp st(1),st
14a:
       9b df e0
                                  fstsw
                                          ax
14d:
       9h
                                  fwait
14e:
       d0 e8
                                  shr
                                          al,1
                                          8f < FpuDiv@16+0x8f >
150:
       0f 82 39 ff ff ff
                                  jb
156:
       f7 45 14 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times80
15d:
       74 05
                                          164 < FpuDiv@16+0x164>
                                  1e
                                          TBYTE PTR [ebp-0x76]
15f:
       db 7d 8a
                                  fstp
162:
       eb 1f
                                          183 < FpuDiv@16+0x183>
                                  jmp
164:
       8b 45 10
                                          eax, DWORD PTR [ebp+0x10]
                                  mov
```

```
167:
       f7 45 14 00 00 10 00
                                 test
                                         DWORD PTR [ebp+0x14],0x100000
                                         174 < FpuDiv@16+0x174>
16e:
       74 04
                                 jе
                                         DWORD PTR [eax]
170:
       d9 18
                                  fstp
172:
       eb 0f
                                  jmp
                                         183 < FpuDiv@16+0x183>
174:
       f7 45 14 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x14],0x200000
17b:
       74 04
                                         181 < FpuDiv@16+0x181>
                                  jе
                                         QWORD PTR [eax]
17d:
       dd 18
                                  fstp
17f:
       eb 02
                                  jmp
                                         183 < FpuDiv@16+0x183>
                                         TBYTE PTR [eax]
181:
       db 38
                                  fstp
183:
       dd 65 94
                                  frstor [ebp-0x6c]
186:
       f7 45 14 01 01 00 00
                                 test
                                         DWORD PTR [ebp+0x14],0x101
18d:
       74 02
                                  jе
                                         191 < FpuDiv@16+0x191>
18f:
       dd d8
                                  fstp
                                         st(0)
191:
       f7 45 14 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0x14],0x80
198:
       74 05
                                  jе
                                         19f < FpuDiv@16+0x19f>
19a:
       dd c7
                                  ffree
                                         st(7)
                                         TBYTE PTR [ebp-0x76]
19c:
       db 6d 8a
                                 fld
19f:
       0c 01
                                         al,0x1
1a1:
       c9
                                 leave
1a2:
       c2 10 00
                                  ret
                                         0x10
```

FpuCosh.obj: file format pe-i386

```
00000000 < FpuCosh@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuCosh@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
                                          1c < FpuCosh@12+0x1c>
  16:
        73 04
                                   jae
  18:
        7a 02
                                   jр
                                          1c < FpuCosh@12+0x1c>
  1a:
        74 65
                                   jе
                                          81 < FpuCosh@12+0x81>
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                   jе
                                          31 < \text{FpuCosh}(12+0x31>
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        eb 59
                                   jmp
                                          8a < FpuCosh@12+0x8a>
  31:
        8b 45 08
                                   mov
                                          eax,DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0\times10],0\times2
                                          41 <_FpuCosh@12+0x41>
  3b:
        74 04
                                   jе
  3d:
        db 28
                                   fld
                                          TBYTE PTR [eax]
                                          8a <_FpuCosh@12+0x8a>
        eb 49
  3f:
                                   jmp
        f7 45 10 00 00 02 00
                                          DWORD PTR [ebp+0x10],0x20000
  41:
                                   test
                                          4e <_FpuCosh@12+0x4e>
  48:
        74 04
                                   ie
        dd 00
                                   fld
  4a:
                                          QWORD PTR [eax]
  4c:
        eb 3c
                                   jmp
                                          8a < FpuCosh@12+0x8a>
  4e:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                          5b < FpuCosh@12+0x5b>
                                   jе
  57:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  59:
        eb 2f
                                   jmp
                                          8a < FpuCosh@12+0x8a>
  5b:
        f7 45 10 04 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x4
                                          68 <_FpuCosh@12+0x68>
  62:
        74 04
                                   jе
  64:
        db 00
                                   fild
                                          DWORD PTR [eax]
  66:
        eb 22
                                   jmp
                                          8a < FpuCosh@12+0x8a>
  68:
        f7 45 10 00 00 00 01
                                   test
                                          DWORD PTR [ebp+0x10],0x1000000
  6f:
        74 04
                                   jе
                                          75 < FpuCosh@12+0x75>
  71:
        df
           28
                                   fild
                                          QWORD PTR [eax]
  73:
        eh 15
                                   jmp
                                          8a < FpuCosh@12+0x8a>
  75:
        f7 45 10 08 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x8
  7c:
        75 09
                                          87 < FpuCosh@12+0x87>
                                   jne
  7e:
        dd 65 94
                                   frstor [ebp-0x6c]
  81:
        33 c0
                                   xor
                                          eax,eax
```

```
c9
83:
                                  leave
84:
       c2 0c 00
                                  ret
                                         0xc
87:
       db 45 08
                                  fild
                                         DWORD PTR [ebp+0x8]
8a:
       d9 ea
                                  fldl2e
8c:
       de c9
                                  fmulp
                                         st(1), st
8e:
       d9 c0
                                  fld
                                         st(0)
90:
       d9 fc
                                  frndint
92:
       d9 c9
                                  fxch
                                         st(1)
94:
       d8 e1
                                  fsub
                                         st, st(1)
96:
       d9 f0
                                  f2xm1
98:
       d9 e8
                                  fld1
9a:
       de c1
                                  faddp
                                         st(1),st
9c:
       d9 fd
                                  fscale
9e:
       dd d9
                                  fstp
                                         st(1)
a0:
       d9 c0
                                  fld
                                         st(0)
a2:
       d9 e8
                                  fld1
a4:
       de f1
                                  fdivp
                                         st(1),st
a6:
       de c1
                                  faddp
                                         st(1), st
a8:
       d9 e8
                                  fld1
aa:
       d9 e0
                                  fchs
ac:
       d9 c9
                                  fxch
                                         st(1)
ae:
       d9 fd
                                  fscale
b0:
       dd d9
                                  fstp
                                         st(1)
b2:
       9b df e0
                                  fstsw
                                         ax
b5:
       9b
                                  fwait
b6:
       d0 e8
                                  shr
                                         al,1
b8:
       72 c4
                                  jb
                                         7e < FpuCosh@12+0x7e>
ba:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
 c1:
       74 05
                                  jе
                                         c8 < FpuCosh@12+0xc8>
 c3:
       db 7d 8a
                                  fstp
                                         TBYTE PTR [ebp-0x76]
 c6:
       eb 1f
                                  jmp
                                         e7 < FpuCosh@12+0xe7>
 c8:
       8b 45 0c
                                  mov
                                         eax, DWORD PTR [ebp+0xc]
 cb:
       f7 45 10 00 00 10 00
                                  test
                                         DWORD PTR [ebp+0x10],0x100000
d2:
       74 04
                                  jе
                                         d8 < FpuCosh@12+0xd8>
d4:
       d9 18
                                  fstp
                                         DWORD PTR [eax]
d6:
       eb 0f
                                  jmp
                                         e7 < FpuCosh@12+0xe7>
d8:
       f7 45 10 00 00 20 00
                                  test
                                         DWORD PTR [ebp+0x10],0x200000
df:
       74 04
                                  jе
                                         e5 < FpuCosh@12+0xe5>
e1:
       dd 18
                                  fstp
                                         QWORD PTR [eax]
e3:
       eb 02
                                  jmp
                                         e7 <_FpuCosh@12+0xe7>
e5:
       db 38
                                  fstp
                                         TBYTE PTR [eax]
e7:
       dd 65 94
                                  frstor [ebp-0x6c]
ea:
       f7 45 10 01 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x1
 f1:
       74 02
                                  jе
                                         f5 < FpuCosh@12+0xf5>
 f3:
       dd d8
                                  fstp
                                         st(0)
 f5:
       f7 45 10 80 00 00 00
                                  test
                                         DWORD PTR [ebp+0x10],0x80
fc:
       74 05
                                  jе
                                         103 < FpuCosh@12+0x103>
fe:
       dd c7
                                  ffree
                                         st(7)
                                  fld
100:
       db 6d 8a
                                         TBYTE PTR [ebp-0x76]
103:
       0c 01
                                         al,0x1
                                  or
105:
       c9
                                  leave
       c2 0c 00
106:
                                  ret
                                         0xc
```

FpuCos.obj: file format pe-i386

```
00000000 < FpuCos@12>:
   0:
        55
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
                                          esp,0xffffff88
        83 c4 88
   3:
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuCos@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuCos@12+0x1c>
  18:
        7a 02
                                          1c < FpuCos@12+0x1c>
                                   jp
```

```
1a:
      74 65
                                 jе
                                        81 < FpuCos@12+0x81>
      9b dd 75 94
                                        [ebp-0x6c]
1c:
                                 fsave
20:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
27:
      74 08
                                 jе
                                        31 < FpuCos@12+0x31>
                                        eax, [ebp-0x6c]
29:
      8d 45 94
                                 lea
2c:
      db 68 1c
                                 fld
                                        TBYTE PTR [eax+0x1c]
2f:
      eb 59
                                 jmp
                                        8a < FpuCos@12+0x8a>
31:
      8b 45 08
                                 mov
                                        eax, DWORD PTR [ebp+0x8]
34:
      f7 45 10 02 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x2
3b:
      74 04
                                 jе
                                        41 < FpuCos@12+0x41>
3d:
      db 28
                                 fld
                                        TBYTE PTR [eax]
3f:
      eb 49
                                 jmp
                                        8a < FpuCos@12+0x8a>
41:
      f7 45 10 00 00 02 00
                                 test
                                        DWORD PTR [ebp+0x10],0x20000
48:
      74 04
                                 jе
                                        4e < FpuCos@12+0x4e>
                                        QWORD PTR [eax]
4a:
      dd 00
                                 fld
4c:
      eb 3c
                                 jmp
                                        8a < FpuCos@12+0x8a>
4e:
      f7 45
             10 00 00 01 00
                                 test
                                        DWORD PTR [ebp+0x10],0x10000
55:
      74 04
                                 jе
                                        5b < FpuCos@12+0x5b>
57:
      d9 00
                                 fld
                                        DWORD PTR [eax]
59:
      eb 2f
                                 jmp
                                        8a < FpuCos@12+0x8a>
5b:
      f7 45 10 04 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x4
62:
      74 04
                                 jе
                                        68 < FpuCos@12+0x68>
64:
      db 00
                                 fild
                                        DWORD PTR [eax]
66:
      eb 22
                                 jmp
                                        8a < FpuCos@12+0x8a>
68:
      f7 45 10 00 00 00 01
                                 test
                                        DWORD PTR [ebp+0x10],0x1000000
6f:
      74 04
                                 jе
                                        75 < FpuCos@12+0x75>
71:
      df 28
                                 fild
                                        QWORD PTR [eax]
73:
      eb 15
                                 jmp
                                        8a < FpuCos@12+0x8a>
75:
      f7 45 10 08 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x8
7c:
      75 09
                                 jne
                                        87 < FpuCos@12+0x87>
7e:
      dd 65 94
                                 frstor [ebp-0x6c]
81:
      33 c0
                                 xor
                                        eax, eax
83:
      c9
                                 leave
84:
      c2 0c 00
                                 ret
                                        0xc
                                        DWORD PTR [ebp+0x8]
87:
      db 45 08
                                 fild
8a:
      f7 45 10 20 00 00 00
                                 test
                                        DWORD PTR [ebp+0\times10],0\times20
91:
      75 0e
                                 jne
                                        a1 < FpuCos@12+0xa1>
93:
      d9 eb
                                 fldpi
95:
      de c9
                                 fmulp
                                        st(1), st
97:
      68 b4 00 00 00
                                 push
                                        0xb4
                                        WORD PTR [esp]
9c:
      de 34 24
                                 fidiv
9f:
      9b
                                 fwait
a0:
      58
                                 pop
                                        eax
a1:
      d9 eb
                                 fldpi
a3:
      d8 c0
                                 fadd
                                        st,st(0)
a5:
      d9 c9
                                 fxch
                                        st(1)
a7:
      d9 f8
                                 fprem
a9:
      d9 ff
                                 fcos
ab:
      9b df e0
                                 fstsw
                                        ax
ae:
      9h
                                 fwait
af:
      d0 e8
                                 shr
                                        al,1
b1:
      72 cb
                                 jb
                                        7e <_FpuCos@12+0x7e>
b3:
      9e
                                 sahf
b4:
      7a f1
                                        a7 < FpuCos@12+0xa7>
                                 jр
b6:
      dd d9
                                 fstp
                                        st(1)
b8:
      f7 45 10 80 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x80
bf:
      74 05
                                        c6 < FpuCos@12+0xc6>
                                 jе
c1:
      db 7d 8a
                                 fstp
                                        TBYTE PTR [ebp-0x76]
c4:
      eb 1f
                                 jmp
                                        e5 < FpuCos@12+0xe5>
c6:
      8b 45 0c
                                 mov
                                        eax, DWORD PTR [ebp+0xc]
c9:
      f7 45 10 00 00 10 00
                                 test
                                        DWORD PTR [ebp+0x10],0x100000
d0:
      74 04
                                        d6 < FpuCos@12+0xd6>
                                 jе
                                 fstp
                                        DWORD PTR [eax]
d2:
      d9 18
d4:
      eb 0f
                                        e5 < FpuCos@12+0xe5>
                                 jmp
d6:
                                 test
      f7 45 10 00 00 20 00
                                        DWORD PTR [ebp+0x10],0x200000
dd:
      74 04
                                        e3 < FpuCos@12+0xe3>
                                 1e
df:
      dd 18
                                 fstp
                                        QWORD PTR [eax]
      eb 02
                                        e5 <_FpuCos@12+0xe5>
e1:
                                 jmp
                                        TBYTE PTR [eax]
e3:
      db 38
                                 fstp
e5:
      dd 65 94
                                 frstor [ebp-0x6c]
```

```
e8:
       f7 45 10 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1
ef:
       74 02
                                  jе
                                          f3 < FpuCos@12+0xf3>
 f1:
       dd d8
                                  fstp
                                          st(0)
 f3:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
 fa:
       74 05
                                          101 < FpuCos@12+0x101>
                                  jе
fc:
       dd c7
                                  ffree
                                          st(7)
                                          TBYTE PTR [ebp-0x76]
fe:
       db 6d 8a
                                  fld
101:
       0c 01
                                          al,0x1
103:
       c9
                                  leave
104:
       c2 0c 00
                                  ret
                                          0xc
```

FpuComp.obj: file format pe-i386

```
00000000 < FpuComp@12>:
   0:
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp, esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
        f7 45 10 01 01 00 00
                                   test
                                           DWORD PTR [ebp+0\times10],0\times101
   d:
        74 0d
                                    jе
                                           1c < FpuComp@12+0x1c>
   f:
        d9 e5
                                    fxam
  11:
        9b df e0
                                    fstsw
                                           ax
  14:
        9b
                                    fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                           1c < FpuComp@12+0x1c>
  18:
        7a 02
                                   jр
                                           1c < FpuComp@12+0x1c>
  1a:
        74 76
                                   jе
                                           92 < FpuComp@12+0x92>
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
  20:
         f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
  27:
        74 0b
                                    jе
                                           34 < \text{FpuComp@}12 + 0 \times 34 >
                                           eax, [ebp-0x6c]
  29:
        8d 45 94
                                    lea
  2c:
        db 68 1c
                                    fld
                                           TBYTE PTR [eax+0x1c]
  2f:
        e9 80 00 00 00
                                    jmp
                                           b4 < FpuComp@12+0xb4>
  34:
        8b 45 08
                                   mov
                                           eax,DWORD PTR [ebp+0x8]
  37:
         f7 45 10 10 00 00 00
                                    test
                                           DWORD PTR [ebp+0x10],0x10
  3e:
        75 58
                                    jne
                                           98 < FpuComp@12+0x98>
  40:
         f7 45 10 02 00 00 00
                                    test
                                           DWORD PTR [ebp+0x10],0x2
  47:
        74 04
                                    jе
                                           4d < FpuComp@12+0x4d>
  49:
        db 28
                                    fld
                                           TBYTE PTR [eax]
  4b:
        eb 67
                                    jmp
                                           b4 < FpuComp@12+0xb4>
  4d:
         f7 45 10 00 00 02 00
                                    test
                                           DWORD PTR [ebp+0x10],0x20000
                                           5a < FpuComp@12+0x5a>
  54:
        74 04
                                    jе
  56:
        dd 00
                                    fld
                                           QWORD PTR [eax]
                                           b4 < FpuComp@12+0xb4>
  58:
        eb 5a
                                    jmp
  5a:
         f7 45 10 00 00 01 00
                                    test
                                           DWORD PTR [ebp+0x10],0x10000
                                           67 <_FpuComp@12+0x67>
  61:
        74 04
                                    jе
        d9 00
  63:
                                    fld
                                           DWORD PTR [eax]
  65:
                                           b4 < FpuComp@12+0xb4>
        eb 4d
                                    jmp
  67:
         f7 45 10 04 00 00 00
                                           DWORD PTR [ebp+0x10],0x4
                                    test
        74 04
                                           74 < \text{FpuComp@}12 + 0 \times 74 >
  6e:
                                    ie
  70:
        db 00
                                           DWORD PTR [eax]
                                    fild
  72:
        eb 40
                                    jmp
                                           b4 < FpuComp@12+0xb4>
  74:
        f7 45 10 00 00 00 01
                                    test
                                           DWORD PTR [ebp+0x10],0x1000000
  7b:
        74 04
                                           81 < FpuComp@12+0x81>
                                    ie
  7d:
        df
            28
                                    fild
                                           QWORD PTR [eax]
  7f:
        eb 33
                                    jmp
                                           b4 < FpuComp@12+0xb4>
  81:
        f7 45 10 08 00 00 00
                                    test
                                           DWORD PTR [ebp+0x10],0x8
  88:
        74 05
                                           8f < FpuComp@12+0x8f>
                                    jе
  8a:
        db 45 08
                                    fild
                                           DWORD PTR [ebp+0x8]
  8d:
        eb 25
                                    jmp
                                           b4 < FpuComp@12+0xb4>
  8f:
        dd 65 94
                                    frstor [ebp-0x6c]
  92:
        33 c0
                                   xor
                                           eax, eax
        c9
  94:
                                    leave
  95:
        c2 0c 00
                                    ret
                                           0xc
  98:
        83 f8 01
                                           eax,0x1
                                   cmp
  9b:
        75 04
                                           a1 < FpuComp@12+0xa1>
                                    jne
        d9 eb
  9d:
                                    fldpi
                                           b4 < FpuComp@12+0xb4>
  9f:
        eb 13
                                   jmp
```

```
a1:
       83 f8 02
                                  cmp
                                          eax,0x2
 a4:
       75 e9
                                  jne
                                          8f < FpuComp@12+0x8f>
 a6:
       d9 e8
                                  fld1
 a8:
       d9 ea
                                  fldl2e
       d8 e1
                                  fsub
                                          st, st(1)
 aa:
       d9 f0
                                  f2xm1
 ac:
 ae:
       d8
          с1
                                  fadd
                                          st, st(1)
 b0:
       d9 fd
                                  fscale
 b2:
       dd d9
                                  fstp
                                          st(1)
 b4:
       f7 45
              10 00 01 00 00
                                  test
                                          DWORD PTR [ebp+0\times10],0\times100
 bb:
       74 0b
                                  jе
                                          c8 < FpuComp@12+0xc8>
 bd:
       8d 45
              94
                                  lea
                                          eax,[ebp-0x6c]
 c0:
       db 68 1c
                                  fld
                                          TBYTE PTR [eax+0x1c]
 c3:
       e9 80 00 00 00
                                  jmp
                                          148 < FpuComp@12+0x148>
 c8:
       8b 45 0c
                                  mov
                                          eax, DWORD PTR [ebp+0xc]
 cb:
       f7 45
              10 00 10 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1000
 d2:
       75
          54
                                  jne
                                          128 < FpuComp@12+0x128>
                                          DWORD PTR [ebp+0x10],0x200
 d4:
       f7 45
              10 00 02 00 00
                                  test
 db:
       74 04
                                  jе
                                          e1 < FpuComp@12+0xe1>
                                          TBYTE PTR [eax]
 dd:
       db 28
                                  fld
 df:
       eb 67
                                  jmp
                                          148 < FpuComp@12+0x148>
                                          DWORD PTR [ebp+0x10],0x80000
 e1:
       f7 45
              10 00 00 08 00
                                  test
 e8:
       74 04
                                  jе
                                          ee < FpuComp@12+0xee>
 ea:
       dd 00
                                  fld
                                          QWORD PTR [eax]
 ec:
       eb 5a
                                  jmp
                                          148 < FpuComp@12+0x148>
                                          DWORD PTR [ebp+0x10],0x40000
 ee:
       f7 45
              10 00 00 04 00
                                  test
 f5:
       74 04
                                  jе
                                          fb < FpuComp@12+0xfb>
 f7:
       d9 00
                                  fld
                                          DWORD PTR [eax]
 f9:
       eb 4d
                                  jmp
                                          148 < FpuComp@12+0x148>
                                          DWORD PTR [ebp+0\times10],0\times400
 fb:
       f7 45
              10 00 04 00 00
                                  test
102:
       74 04
                                  jе
                                          108 < FpuComp@12+0x108>
                                          DWORD PTR [eax]
104:
       db 00
                                  fild
106:
       eb 40
                                  jmp
                                          148 < FpuComp@12+0x148>
                                          DWORD PTR [ebp+0x10],0x2000000
108:
       f7 45
              10 00 00 00 02
                                  test
                                          115 < FpuComp@12+0x115>
10f:
       74 04
                                  jе
                                          QWORD PTR [eax]
111:
       df
          28
                                  fild
113:
       eb
          33
                                  jmp
                                          148 < FpuComp@12+0x148>
                                          DWORDPTR [ebp+0x10],0x800
115:
       f7 45
              10 00 08 00 00
                                  test
11c:
       74 05
                                  jе
                                          123 < FpuComp@12+0x123>
11e:
       db 45 0c
                                  fild
                                          DWORD PTR [ebp+0xc]
121:
       eb 25
                                  jmp
                                          148 < FpuComp@12+0x148>
123:
       e9 67 ff ff ff
                                  jmp
                                          8f < FpuComp@12+0x8f>
128:
       83 f8 01
                                  cmp
                                          eax,0x1
12b:
       75 04
                                  jne
                                          131 < FpuComp@12+0x131>
12d:
       d9 eb
                                  fldpi
12f:
       eb
          17
                                  jmp
                                          148 < FpuComp@12+0x148>
131:
       83
          f8 02
                                  cmp
                                          eax,0x2
134:
       0f 85 55 ff ff ff
                                  ine
                                          8f < FpuComp@12+0x8f>
13a:
       d9 e8
                                  fld1
       d9 ea
                                  fldl2e
13c:
13e:
       d8 e1
                                  fsub
                                          st, st(1)
140:
       d9 f0
                                  f2xm1
142:
       d8 c1
                                  fadd
                                          st, st(1)
144:
       d9 fd
                                  fscale
146:
       dd d9
                                  fstp
                                          st(1)
148:
       d9 c9
                                  fxch
                                          st(1)
14a:
       d8 d1
                                  fcom
                                          st(1)
14c:
       9b df e0
                                  fstsw
                                          ax
14f:
       9b
                                  fwait
150:
       d0 e8
                                  shr
                                          al,1
                                          8f < FpuComp@12+0x8f>
152:
       0f 82 37 ff ff ff
                                  jb
158:
       96
                                  sahf
159:
       Of 8a 30 ff ff ff
                                          8f < FpuComp@12+0x8f>
                                  jр
15f:
       77 10
                                          171 < FpuComp@12+0x171>
                                  ja
161:
       72 07
                                  jЬ
                                          16a < FpuComp@12+0x16a>
163:
       b8 01 00 00 00
                                          eax,0x1
                                  mov
168:
       eb 0c
                                          176 < FpuComp@12+0x176>
                                  jmp
16a:
       b8 04 00 00 00
                                          eax,0x4
                                  mov
16f:
       eb 05
                                          176 < FpuComp@12+0x176>
                                  jmp
171:
       b8 02 00 00 00
                                          eax,0x2
                                  mov
```

```
176: dd 65 94 frstor [ebp-0x6c]
179: c9 leave
17a: c2 0c 00 ret 0xc
```

FpuChs.obj: file format pe-i386

```
00000000 < FpuChs@12>:
   0:
                                   push
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                           1c < FpuChs@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                           1c < FpuChs@12+0x1c>
                                           1c < FpuChs@12+0x1c>
  18:
        7a 02
                                   jр
                                           5e < FpuChs@12+0x5e>
  1a:
        74 42
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
                                           DWORD PTR [ebp+0x10],0x1
  20:
        f7 45 10 01 00 00 00
                                   test
  27:
        74 08
                                   jе
                                           31 < FpuChs@12+0x31>
                                           eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
                                           TBYTE PTR [eax+0x1c]
  2c:
        db 68 1c
                                   fld
                                           69 < FpuChs@12+0x69>
  2f:
        eb 38
                                   jmp
                                           eax, DWORD PTR [ebp+0x8]
  31:
        8b 45 08
                                   mov
  34:
        f7 45 10 02 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                           41 <_FpuChs@12+0x41>
                                           TBYTE PTR [eax]
  3d:
        db 28
                                   fld
  3f:
        eb 28
                                   jmp
                                           69 < FpuChs@12+0x69>
  41:
        f7 45 10 00 00 02 00
                                   test
                                           DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                           4e < FpuChs@12+0x4e>
  4a:
        dd 00
                                   fld
                                           QWORD PTR [eax]
  4c:
        eb 1b
                                   jmp
                                           69 < FpuChs@12+0x69>
  4e:
        f7 45
               10 00 00 01 00
                                   test
                                           DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                   jе
                                           5b < FpuChs@12+0x5b>
  57:
        d9 00
                                   fld
                                           DWORD PTR [eax]
  59:
        eb 0e
                                   jmp
                                           69 < FpuChs@12+0x69>
                                   frstor [ebp-0x6c]
  5b:
        dd 65
               94
  5e:
        33 c0
                                   xor
                                           eax, eax
  60:
        c9
                                   leave
  61:
        c2 0c 00
                                   ret
                                           0xc
  64:
        8b 45 08
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
  67:
        db 28
                                   fld
                                           TBYTE PTR [eax]
  69:
        d9 e0
                                   fchs
  6b:
        9b df e0
                                   fstsw
                                           ax
  6e:
        9h
                                   fwait
  6f:
        d0 e8
                                   shr
                                           al,1
  71:
        72 e8
                                   jb
                                           5b < FpuChs@12+0x5b>
  73:
        f7 45 10 80 00 00 00
                                           DWORD PTR [ebp+0\times10],0\times80
                                   test
  7a:
        74 05
                                   jе
                                           81 < FpuChs@12+0x81>
                                           TBYTE PTR [ebp-0x76]
  7c:
        db 7d 8a
                                   fstp
  7f:
        eb 1f
                                   jmp
                                           a0 < FpuChs@12+0xa0>
  81:
        8b 45 0c
                                   mov
                                           eax,DWORD PTR [ebp+0xc]
  84:
        f7 45 10 00 00 10 00
                                   test
                                           DWORD PTR [ebp+0x10],0x100000
  8b:
        74 04
                                           91 < FpuChs@12+0x91>
                                   jе
  8d:
        d9 18
                                   fstp
                                           DWORD PTR [eax]
  8f:
        eb 0f
                                   jmp
                                           a0 < FpuChs@12+0xa0>
  91:
        f7 45 10 00 00 20 00
                                   test
                                           DWORD PTR [ebp+0x10],0x200000
                                           9e <_FpuChs@12+0x9e>
  98:
        74 04
                                   jе
                                   fstp
  9a:
        dd 18
                                           QWORD PTR [eax]
  9c:
        eb 02
                                   jmp
                                           a0 < FpuChs@12+0xa0>
  9e:
        db 38
                                   fstp
                                           TBYTE PTR [eax]
                                   frstor [ebp-0x6c]
  a0:
        dd 65 94
  a3:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0\times10],0\times1
        74 02
                                   jе
                                           ae < FpuChs@12+0xae>
  aa:
        dd d8
                                   fstp
                                           st(0)
  ac:
```

```
f7 45 10 80 00 00 00
ae:
                                 test
                                         DWORD PTR [ebp+0x10],0x80
b5:
      74 05
                                 jе
                                         bc < FpuChs@12+0xbc>
                                         st(7)
b7:
      dd c7
                                 ffree
b9:
      db 6d 8a
                                 fld
                                         TBYTE PTR [ebp-0x76]
bc:
      0c 01
                                 or
                                         al,0x1
be:
      c9
                                 leave
bf:
      c2 0c 00
                                 ret
                                         0xc
```

FpuAtoFL.obj: file format pe-i386

```
00000000 < FpuAtoFL@12>:
   0:
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp, esp
        81 c4 74 ff ff ff
   3:
                                   add
                                           esp,0xffffff74
   9:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
   d:
        53
                                   push
                                           ebx
   e:
        51
                                   push
                                           ecx
   f:
        52
                                   push
                                           edx
  10:
         56
                                   push
                                           esi
  11:
         57
                                   push
                                           edi
  12:
        33 c0
                                   xor
                                           eax, eax
  14:
        33 db
                                   xor
                                           ebx,ebx
  16:
        33 d2
                                   xor
                                           edx,edx
        8d bd 76 ff ff ff
  18:
                                   lea
                                           edi,[ebp-0x8a]
  1e:
                                   stos
                                           DWORD PTR es:[edi],eax
  1f:
        ab
                                   stos
                                           DWORD PTR es:[edi],eax
                                           DWORD PTR es:[edi],eax
  20:
        ab
                                   stos
                                           DWORD PTR es:[edi],eax
  21:
        ab
                                   stos
  22:
        ab
                                   stos
                                           DWORD PTR es:[edi],eax
  23:
        8d bd 7e ff ff ff
                                   lea
                                           edi,[ebp-0x82]
  29:
        8b 75 08
                                   mov
                                           esi, DWORD PTR [ebp+0x8]
  2c:
        b9 12 00 00 00
                                   mov
                                           ecx,0x12
  31:
        ac
                                   lods
                                           al, BYTE PTR ds:[esi]
        3c 20
  32:
                                   cmp
                                           al,0x20
  34:
        74 fb
                                   jе
                                           31 < FpuAtoFL@12+0x31>
  36:
        0a c0
                                   or
                                           al,al
  38:
        75 0e
                                   jne
                                           48 <_FpuAtoFL@12+0x48>
  3a:
        dd 65 94
                                   frstor [ebp-0x6c]
  3d:
        33 c0
                                   xor
                                           eax, eax
  3f:
        5f
                                   pop
                                           edi
  40:
        5e
                                   pop
                                           esi
  41:
        5a
                                   pop
                                           edx
  42:
        59
                                   pop
                                           ecx
  43:
        5b
                                   pop
                                           ebx
  44:
        c9
                                    leave
  45:
        c2 0c 00
                                   ret
                                           0xc
  48:
        3c 2b
                                   cmp
                                           al,0x2b
        74 06
                                           52 < FpuAtoFL@12+0x52>
  4a:
                                   jе
  4c:
        3c 2d
                                   cmp
                                           al,0x2d
  4e:
        75 0b
                                   jne
                                           5b <_FpuAtoFL@12+0x5b>
  50:
        b4 80
                                   mov
                                           ah,0x80
  52:
        88 67 01
                                   mov
                                           BYTE PTR [edi+0x1],ah
  55:
        88 67 0b
                                   mov
                                           BYTE PTR [edi+0xb],ah
  58:
        33 c0
                                   xor
                                           eax, eax
  5a:
                                   lods
                                           al, BYTE PTR ds:[esi]
        ac
  5b:
        3c 2e
                                   cmp
                                           al,0x2e
  5d:
        75 19
                                    jne
                                           78 < FpuAtoFL@12+0x78>
                                           edi, [ebp-0x8a]
  5f:
        8d bd 76 ff ff ff
                                    lea
  65:
        e8 c4 02 00 00
                                   call
                                           32e < FpuAtoFL@12+0x32e>
  6a:
                                   lods
                                           al,BYTE PTR ds:[esi]
        ac
  6b:
        8d 7d 88
                                   lea
                                           edi,[ebp-0x78]
  6e:
        b1 12
                                   mov
                                           cl,0x12
  70:
        80 e7 04
                                   and
                                           bh,0x4
  73:
        e9 13 01 00 00
                                    jmp
                                           18b < FpuAtoFL@12+0x18b>
                                           al,0x65
  78:
        3c 65
                                   cmp
                                           93 <_FpuAtoFL@12+0x93>
  7a:
        75 17
                                   jne
        80 f9 12
  7c:
                                           cl,0x12
                                   cmp
```

```
7f:
       75 02
                                         83 < FpuAtoFL@12+0x83>
                                  jne
81:
       eb b7
                                  jmp
                                         3a < FpuAtoFL@12+0x3a>
83:
       8d bd 76 ff ff ff
                                  lea
                                         edi,[ebp-0x8a]
89:
       e8 a0 02 00 00
                                  call
                                         32e < FpuAtoFL@12+0x32e>
                                         2c4 < FpuAtoFL@12+0x2c4>
8e:
       e9 31 02 00 00
                                  jmp
93:
       3c 45
                                  cmp
                                         al,0x45
95:
       75 17
                                  jne
                                         ae < FpuAtoFL@12+0xae>
97:
       80 f9 12
                                         cl,0x12
                                  cmp
9a:
       75 02
                                  jne
                                         9e < FpuAtoFL@12+0x9e>
9c:
       eb 9c
                                         3a < FpuAtoFL@12+0x3a>
                                  jmp
9e:
       8d bd 76 ff ff ff
                                  lea
                                         edi,[ebp-0x8a]
a4:
       e8 85 02 00 00
                                  call
                                         32e <_FpuAtoFL@12+0x32e>
a9:
       e9 16 02 00 00
                                  jmp
                                         2c4 < FpuAtoFL@12+0x2c4>
 ae:
       0a c0
                                  or
                                         al,al
b0:
       75 15
                                  jne
                                         c7 < FpuAtoFL@12+0xc7>
b2:
       f6 c7 04
                                  test
                                         bh,0x4
b5:
       74 83
                                  jе
                                         3a < FpuAtoFL@12+0x3a>
b7:
       8d bd 76 ff ff ff
                                  lea
                                         edi,[ebp-0x8a]
bd:
       e8 6c 02 00 00
                                  call
                                         32e < FpuAtoFL@12+0x32e>
                                         26f < FpuAtoFL@12+0x26f>
 c2:
       e9 a8 01 00 00
                                  jmp
 c7:
       2c 30
                                  sub
                                         al,0x30
                                         3a <_FpuAtoFL@12+0x3a>
 c9:
       Of 82 6b ff ff ff
                                  jb
 cf:
       75 0e
                                  jne
                                         df < FpuAtoFL@12+0xdf>
d1:
       f6 c7 02
                                  test
                                         bh,0x2
d4:
       75 09
                                  jne
                                         df < FpuAtoFL@12+0xdf>
d6:
       80 cf 04
                                  or
                                         bh,0x4
d9:
       ac
                                  lods
                                         al, BYTE PTR ds:[esi]
da:
       e9 7c ff ff ff
                                  jmp
                                         5b < FpuAtoFL@12+0x5b>
df:
       3c 09
                                  cmp
                                         al,0x9
                                         3a <_FpuAtoFL@12+0x3a>
e1:
       0f 87 53 ff ff ff
                                  ja
e7:
       80 cf 06
                                  or
                                         bh,0x6
ea:
       83 e9 01
                                  sub
                                         ecx,0x1
ed:
       0f 82 47 ff ff ff
                                  jb
                                         3a < FpuAtoFL@12+0x3a>
 f3:
       8a e0
                                 mov
                                         ah,al
 f5:
       ac
                                  lods
                                         al, BYTE PTR ds:[esi]
 f6:
       3c 2e
                                  cmp
                                         al,0x2e
 f8:
       75
          1e
                                  jne
                                         118 < FpuAtoFL@12+0x118>
fa:
       b0 00
                                  mov
                                         al,0x0
 fc:
       66 c1 c8 04
                                  ror
                                         ax,0x4
       88 07
100:
                                 mov
                                         BYTE PTR [edi],al
102:
       8d bd 76 ff ff ff
                                  lea
                                         edi,[ebp-0x8a]
108:
       e8 21 02 00 00
                                  call
                                         32e <_FpuAtoFL@12+0x32e>
10d:
       8d 7d 88
                                  lea
                                         edi,[ebp-0x78]
110:
       b1 12
                                 mov
                                         cl,0x12
112:
       80 e7 04
                                  and
                                         bh,0x4
115:
       ac
                                  lods
                                         al, BYTE PTR ds:[esi]
116:
       eb 73
                                  jmp
                                         18b <_FpuAtoFL@12+0x18b>
118:
       3c 65
                                  cmp
                                         al,0x65
11a:
       75 18
                                  jne
                                         134 <_FpuAtoFL@12+0x134>
11c:
       b0 00
                                 mov
                                         al,0x0
11e:
       66 c1 c8 04
                                  ror
                                         ax,0x4
122:
       88 07
                                 mov
                                         BYTE PTR [edi],al
       8d bd 76 ff ff ff
124:
                                  lea
                                         edi,[ebp-0x8a]
12a:
       e8 ff 01 00 00
                                  call
                                         32e < FpuAtoFL@12+0x32e>
12f:
       e9 90 01 00 00
                                  jmp
                                         2c4 < FpuAtoFL@12+0x2c4>
134:
       3c 45
                                  cmp
                                         al,0x45
                                         150 <_FpuAtoFL@12+0x150>
136:
       75 18
                                  jne
138:
       b0 00
                                  mov
                                         al,0x0
13a:
       66 c1 c8 04
                                  ror
                                         ax,0x4
13e:
       88 07
                                  mov
                                         BYTE PTR [edi],al
140:
       8d bd 76 ff ff ff
                                  lea
                                         edi,[ebp-0x8a]
146:
       e8 e3 01 00 00
                                  call
                                         32e < FpuAtoFL@12+0x32e>
14b:
       e9 74 01 00 00
                                  jmp
                                         2c4 < FpuAtoFL@12+0x2c4>
150:
       0a c0
                                         al,al
                                  or
152:
       75 16
                                         16a < FpuAtoFL@12+0x16a>
                                  jne
154:
       66 c1 c8 04
                                         ax,0x4
                                  ror
158:
       88 07
                                         BYTE PTR [edi],al
                                 mov
15a:
       8d bd 76 ff ff ff
                                         edi,[ebp-0x8a]
                                  lea
160:
       e8 c9 01 00 00
                                  call
                                         32e < FpuAtoFL@12+0x32e>
165:
       e9 05 01 00 00
                                         26f < FpuAtoFL@12+0x26f>
                                  jmp
```

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```
16a:
       2c 30
                                  sub
                                         al,0x30
       Of 82 c8 fe ff ff
16c:
                                  jb
                                         3a < FpuAtoFL@12+0x3a>
       3c 09
172:
                                  cmp
                                         al,0x9
       Of 87 cO fe ff ff
174:
                                         3a < FpuAtoFL@12+0x3a>
                                  jа
17a:
       49
                                  dec
17b:
       c0 c0 04
                                  rol
                                         al,0x4
17e:
       66 c1 c8 04
                                  ror
                                         ax,0x4
182:
       88 07
                                  mov
                                         BYTE PTR [edi],al
184:
       4f
                                  dec
185:
                                  lods
                                         al,BYTE PTR ds:[esi]
186:
       e9 d0 fe ff ff
                                  jmp
                                         5b < FpuAtoFL@12+0x5b>
18b:
       3c 65
                                  cmp
                                         al,0x65
18d:
       75 0d
                                  jne
                                         19c < FpuAtoFL@12+0x19c>
18f:
       8d 7d 80
                                  lea
                                         edi,[ebp-0x80]
192:
       e8 e8 01 00 00
                                  call
                                         37f < FpuAtoFL@12+0x37f>
                                         2c4 < FpuAtoFL@12+0x2c4>
197:
       e9 28 01 00 00
                                  jmp
19c:
       3c 45
                                  cmp
                                         al,0x45
19e:
       75 0d
                                  jne
                                         1ad < FpuAtoFL@12+0x1ad>
1a0:
       8d 7d 80
                                  lea
                                         edi,[ebp-0x80]
                                         37f < FpuAtoFL@12+0x37f >
1a3:
       e8 d7 01 00 00
                                  call
1a8:
       e9 17 01 00 00
                                  jmp
                                         2c4 < FpuAtoFL@12+0x2c4>
1ad:
       0a c0
                                  or
                                         al,al
laf:
       75 16
                                  jne
                                          1c7 < FpuAtoFL@12+0x1c7>
1b1:
       f6 c7 04
                                  test
                                         bh,0x4
1b4:
       0f 84 80 fe ff ff
                                  jе
                                         3a < FpuAtoFL@12+0x3a>
1ba:
       8d 7d 80
                                  lea
                                         edi,[ebp-0x80]
1bd:
       e8 bd 01 00 00
                                  call
                                         37f < FpuAtoFL@12+0x37f>
                                         26f < FpuAtoFL@12+0x26f>
1c2:
       e9 a8 00 00 00
                                  jmp
1c7:
       2c 30
                                  sub
                                         al,0x30
1c9:
       Of 82 6b fe ff ff
                                  jb
                                         3a < FpuAtoFL@12+0x3a>
1cf:
       3c 09
                                  cmp
                                         al,0x9
1d1:
       0f 87 63 fe ff ff
                                  ja
                                         3a < FpuAtoFL@12+0x3a>
1d7:
       80 cf 04
                                  or
                                         bh,0x4
1da:
       0a c0
                                  or
                                         al,al
1dc:
       74 03
                                  jе
                                         1e1 < FpuAtoFL@12+0x1e1>
1de:
       80 cf 02
                                  or
                                         bh,0x2
1e1:
       83 e9 01
                                  sub
                                         ecx,0x1
1e4:
       73 0d
                                  jae
                                         1f3 < FpuAtoFL@12+0x1f3>
1e6:
       0a c0
                                  or
                                         al,al
1e8:
       75 04
                                  jne
                                         lee < FpuAtoFL@12+0x1ee>
1ea:
       41
                                  inc
                                         ecx
1eb:
                                  lods
                                         al, BYTE PTR ds:[esi]
       ac
lec:
       eb 9d
                                  jmp
                                         18b <_FpuAtoFL@12+0x18b>
lee:
       e9 47 fe ff ff
                                  jmp
                                         3a < FpuAtoFL@12+0x3a>
1f3:
       8a e0
                                  mov
                                         ah,al
1f5:
       ac
                                  lods
                                         al, BYTE PTR ds:[esi]
1f6:
       3c 65
                                  cmp
                                         al,0x65
1f8:
       75 15
                                  jne
                                         20f < FpuAtoFL@12+0x20f>
1fa:
       b0 00
                                  mov
                                         al,0x0
1fc:
       66 c1 c8 04
                                  ror
                                         ax,0x4
200:
       88 07
                                  mov
                                         BYTE PTR [edi],al
202:
       8d 7d 80
                                  lea
                                         edi,[ebp-0x80]
205:
       e8 75 01 00 00
                                  call
                                         37f < FpuAtoFL@12+0x37f >
20a:
       e9 b5 00 00 00
                                  jmp
                                         2c4 < FpuAtoFL@12+0x2c4>
20f:
       3c 45
                                  cmp
                                         al,0x45
211:
       75 15
                                  jne
                                         228 < FpuAtoFL@12+0x228>
213:
       b0 00
                                  mov
                                         al,0x0
215:
       66 c1 c8 04
                                  ror
                                         ax,0x4
219:
       88 07
                                  mov
                                         BYTE PTR [edi],al
21b:
       8d 7d 80
                                  lea
                                         edi,[ebp-0x80]
21e:
       e8 5c 01 00 00
                                  call
                                         37f < FpuAtoFL@12+0x37f >
223:
       e9 9c 00 00 00
                                  jmp
                                         2c4 < FpuAtoFL@12+0x2c4>
228:
       0a c0
                                         al,al
                                  or
22a:
       75 1b
                                         247 <_FpuAtoFL@12+0x247>
                                  jne
22c:
       f6 c7 04
                                  test
                                         bh,0x4
                                         3a <_FpuAtoFL@12+0x3a>
22f:
       0f 84 05 fe ff ff
                                  jе
235:
       b0 00
                                         al,0x0
                                  mov
237:
       66 c1 c8 04
                                  ror
                                         ax,0x4
23b:
       88 07
                                         BYTE PTR [edi],al
                                  mov
23d:
       8d 7d 80
                                         edi, [ebp-0x80]
                                  lea
```

```
37f < FpuAtoFL@12+0x37f>
240:
       e8 3a 01 00 00
                                  call
                                          26f < FpuAtoFL@12+0x26f>
       eb 28
245:
                                  jmp
       2c 30
247:
                                  sub
                                          al,0x30
249:
       Of 82 eb fd ff ff
                                  jЬ
                                          3a < FpuAtoFL@12+0x3a>
24f:
       3c 09
                                  cmp
                                          al,0x9
251:
       Of 87 e3 fd ff ff
                                  jа
                                          3a < FpuAtoFL@12+0x3a>
257:
       0a c0
                                  or
                                          al,al
259:
       74 03
                                  jе
                                          25e < FpuAtoFL@12+0x25e>
25b:
       80 cf 02
                                          bh,0x2
                                  or
25e:
       49
                                  dec
                                          ecx
25f:
       c0 c0 04
                                  rol
                                          al,0x4
262:
       66 c1 c8 04
                                  ror
                                          ax,0x4
266:
       88 07
                                  mov
                                          BYTE PTR [edi],al
268:
       4f
                                  dec
269:
       ac
                                  lods
                                          al, BYTE PTR ds:[esi]
26a:
       e9 1c ff ff ff
                                  jmp
                                          18b < FpuAtoFL@12+0x18b>
26f:
       9b df e0
                                  fstsw
272:
       9b
                                  fwait
273:
       d0 e8
                                  shr
                                          al,1
275:
       Of 82 bf fd ff ff
                                  jb
                                          3a < FpuAtoFL@12+0x3a>
27b:
       f7 45 10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
282:
       74 05
                                  jе
                                          289 < FpuAtoFL@12+0x289>
                                          TBYTE PTR [ebp-0x76]
284:
       db 7d 8a
                                  fstp
287:
       eb 1f
                                  jmp
                                          2a8 < FpuAtoFL@12+0x2a8>
       8b 45 0c
289:
                                  mov
                                          eax, DWORD PTR [ebp+0xc]
28c:
       f7 45 10 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x10],0x100000
293:
       74 04
                                  jе
                                          299 < FpuAtoFL@12+0x299>
                                          DWORD PTR [eax]
295:
       d9 18
                                  fstp
297:
       eb 0f
                                  jmp
                                          2a8 < FpuAtoFL@12+0x2a8>
                                          DWORD PTR [ebp+0x10],0x200000
299:
       f7 45
              10 00 00 20 00
                                  test
2a0:
       74 04
                                  jе
                                          2a6 < FpuAtoFL@12+0x2a6>
                                          QWORD PTR [eax]
2a2:
       dd 18
                                  fstp
2a4:
       eb 02
                                  jmp
                                          2a8 < FpuAtoFL@12+0x2a8>
                                          TBYTE PTR [eax]
2a6:
       db 38
                                  fstp
2a8:
       dd 65 94
                                  frstor [ebp-0x6c]
2ab:
       f7 45
              10 80 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x80
2h2:
       74 05
                                  jе
                                          2b9 < FpuAtoFL@12+0x2b9>
2b4:
       dd c7
                                  ffree
                                          st(7)
2b6:
       db 6d 8a
                                  fld
                                          TBYTE PTR [ebp-0x76]
       0c 01
2b9:
                                  or
                                          al,0x1
2bb:
       5f
                                  pop
                                          edi
2bc:
       5e
                                  pop
                                          esi
2bd:
       5a
                                  pop
                                          edx
2be:
       59
                                  pop
                                          ecx
2bf:
       5b
                                          ebx
                                  pop
2c0:
       c9
                                  leave
2c1:
       c2 0c 00
                                  ret
                                          0xc
2c4:
       33 c0
                                  xor
                                          eax, eax
2c6:
       33 d2
                                  xor
                                          edx,edx
                                          al, BYTE PTR ds:[esi]
2c8:
       ac
                                  lods
2c9:
       3c 2b
                                  cmp
                                          al,0x2b
       74 07
2cb:
                                  jе
                                          2d4 < FpuAtoFL@12+0x2d4>
                                  cmp
2cd:
       3c 2d
                                          al,0x2d
2cf:
       75 04
                                  jne
                                          2d5 < FpuAtoFL@12+0x2d5>
2d1:
       f9
                                  stc
2d2:
       d1 d8
                                  rcr
                                          eax,1
2d4:
                                  lods
                                          al, BYTE PTR ds:[esi]
       ac
2d5:
       50
                                  push
                                          eax
2d6:
       25 ff 00 00 00
                                  and
                                          eax,0xff
                                          2e3 <_FpuAtoFL@12+0x2e3>
2db:
       75 06
                                  jne
2dd:
       58
                                  pop
                                          eax
2de:
       e9 57 fd ff ff
                                  jmp
                                          3a <_FpuAtoFL@12+0x3a>
2e3:
       2c 30
                                  sub
                                          al,0x30
                                          2dd <_FpuAtoFL@12+0x2dd>
2e5:
       72 f6
                                  jЬ
2e7:
                                          al,0x9
       3c 09
                                  cmp
2e9:
       77 f2
                                          2dd < FpuAtoFL@12+0x2dd>
                                  jа
2eb:
       03 d2
                                  add
                                          edx,edx
2ed:
       8d 14 92
                                  lea
                                          edx,[edx+edx*4]
2f0:
       03 d0
                                  add
                                          edx,eax
2f2:
       81 fa 43 13 00 00
                                          edx,0x1343
                                  cmp
```

```
2f8:
       77 e3
                                   jа
                                          2dd < FpuAtoFL@12+0x2dd>
2fa:
                                   lods
                                          al, BYTE PTR ds:[esi]
       ac
2fb:
       0a c0
                                  or
                                          al,al
2fd:
       75 e4
                                  jne
                                          2e3 < FpuAtoFL@12+0x2e3>
2ff:
       58
                                  pop
300:
       d1 d0
                                   rcl
                                          eax,1
302:
       73 02
                                  jae
                                          306 < FpuAtoFL@12+0x306>
304:
       f7 da
                                  neg
                                          edx
306:
       e8 07 00 00 00
                                  call
                                          312 < FpuAtoFL@12+0x312>
30b:
       de c9
                                  fmulp
                                          st(1), st
30d:
       e9 5d ff ff ff
                                   jmp
                                          26f < FpuAtoFL@12+0x26f>
312:
       52
                                  push
313:
       db 04 24
                                  fild
                                          DWORD PTR [esp]
316:
       d9 e9
                                  fldl2t
318:
       de c9
                                  fmulp
                                          st(1), st
31a:
       5a
                                  pop
                                          edx
31b:
       d9 c0
                                  fld
                                          st(0)
31d:
       d9 fc
                                  frndint
31f:
       dc e9
                                  fsubr
                                          st(1),st
321:
       d9 c9
                                  fxch
                                          st(1)
323:
       d9 f0
                                  f2xm1
325:
       d9 e8
                                  fld1
327:
       de c1
                                  faddp
                                          st(1),st
329:
       d9 fd
                                  fscale
32b:
       dd d9
                                  fstp
                                          st(1)
32d:
       с3
                                  ret
32e:
       56
                                  push
                                          esi
       80 f9 12
32f:
                                  cmp
                                          cl,0x12
332:
       75 04
                                  jne
                                          338 < FpuAtoFL@12+0x338>
334:
       d9 ee
                                  fldz
336:
       eb 45
                                  jmp
                                          37d < FpuAtoFL@12+0x37d>
338:
       8b f7
                                  mov
                                          esi,edi
33a:
       83 e9
                                  sub
                                          ecx,0x12
33d:
       f7 d9
                                  neg
                                          ecx
33f:
       d1 e9
                                  shr
                                          ecx,1
341:
       57
                                  push
                                          edi
342:
       72 0d
                                  jb
                                          351 < FpuAtoFL@12+0x351>
344:
       ba 09 00 00 00
                                  mov
                                          edx,0x9
349:
       2b d1
                                  sub
                                          edx,ecx
34b:
       03 f2
                                  add
                                          esi,edx
34d:
       f3 a4
                                  rep movs BYTE PTR es:[edi],BYTE PTR ds:[esi]
34f:
       eb 23
                                  jmp
                                          374 < FpuAtoFL@12+0x374>
351:
       ba 08 00 00 00
                                  mov
                                          edx,0x8
356:
       2b d1
                                  sub
                                          edx,ecx
358:
       03 f2
                                  add
                                          esi,edx
35a:
       33 c0
                                  xor
                                          eax, eax
35c:
       ac
                                  lods
                                          al, BYTE PTR ds:[esi]
35d:
       66 c1 c0 04
                                  rol
                                          ax,0x4
361:
       85 c9
                                  test
                                          ecx,ecx
       74 0c
                                  jе
                                          371 < FpuAtoFL@12+0x371>
363:
       c0 c4 04
365:
                                  rol
                                          ah,0x4
                                          al, BYTE PTR ds:[esi]
368:
       ac
                                  lods
369:
       66 c1 c0 04
                                  rol
                                          ax,0x4
36d:
       aa
                                  stos
                                          BYTE PTR es:[edi],al
36e:
       49
                                  dec
                                          ecx
36f:
       75 f4
                                  jne
                                          365 < FpuAtoFL@12+0x365>
371:
       88 27
                                  mov
                                          BYTE PTR [edi], ah
373:
       47
                                  inc
                                          edi
       8b ca
374:
                                  mov
                                          ecx,edx
376:
       33 c0
                                  xor
                                          eax, eax
                                  rep stos BYTE PTR es:[edi],al
378:
       f3 aa
37a:
       5f
                                  pop
                                          edi
37b:
       df 27
                                  fbld
                                          TBYTE PTR [edi]
37d:
       5e
                                  pop
                                          esi
37e:
                                  ret
       с3
37f:
       f6 c7 02
                                  test
                                          bh,0x2
       75 01
382:
                                          385 < FpuAtoFL@12+0x385>
                                  jne
384:
                                  ret
       с3
385:
       80 f9 12
                                          cl,0x12
                                  cmp
388:
       75 04
                                          38e < FpuAtoFL@12+0x38e>
                                  jne
```

```
fldz
38a:
       d9 ee
38c:
       eb 0e
                                  jmp
                                         39c < FpuAtoFL@12+0x39c>
                                         TBYTE PTR [edi]
       df 27
38e:
                                  fbld
390:
       ba ee ff ff ff
                                 mov
                                         edx,0xffffffee
       e8 78 ff ff ff
395:
                                 call
                                         312 <_FpuAtoFL@12+0x312>
                                         st(1), st
39a:
       de c9
                                 fmulp
                                 faddp st(1),st
39c:
       de c1
39e:
       c3
                                  ret
```

file format pe-i386

FpuArctanh.obj:

8a:

8b:

9b

d1 e8

```
Disassembly of section .text:
00000000 < FpuArctanh@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp, esp
                                          esp,0xffffff88
   3:
        83 c4 88
                                   add
        f7 45 10 01 00 00 00
   6:
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuArctanh@12+0x1c>
   f:
        d9 e5
                                   fxam
        9b df e0
  11:
                                   fstsw
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                          1c < FpuArctanh@12+0x1c>
                                          1c < FpuArctanh@12+0x1c>
  18:
        7a 02
                                   jр
                                          5e < FpuArctanh@12+0x5e>
  1a:
        74 42
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
                                          DWORD PTR [ebp+0x10],0x1
  20:
        f7 45 10 01 00 00 00
                                   test
  27:
        74 08
                                   jе
                                          31 < FpuArctanh@12+0x31>
                                          eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
                                          TBYTE PTR [eax+0x1c]
  2c:
        db 68 1c
                                   fld
                                          69 < FpuArctanh@12+0x69>
  2f:
        eb 38
                                   jmp
  31:
        8b 45 08
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                          41 < FpuArctanh@12+0x41>
                                          TBYTE PTR [eax]
  3d:
        db 28
                                   fld
  3f:
        eb 28
                                   jmp
                                          69 < FpuArctanh@12+0x69>
  41:
        f7 45 10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                          4e < FpuArctanh@12+0x4e>
  4a:
        dd 00
                                   fld
                                          QWORD PTR [eax]
        eb 1b
  4c:
                                   jmp
                                          69 < FpuArctanh@12+0x69>
  4e:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                   jе
                                          5b < FpuArctanh@12+0x5b>
  57:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  59:
        eb 0e
                                   jmp
                                          69 < FpuArctanh@12+0x69>
  5b:
        dd 65 94
                                   frstor [ebp-0x6c]
  5e:
        33 c0
                                   xor
                                          eax, eax
  60:
        c9
                                   leave
  61:
        c2 0c 00
                                   ret
                                          0xc
  64:
        8b 45 08
                                          eax, DWORD PTR [ebp+0x8]
                                   mov
  67:
        db 28
                                   fld
                                          TBYTE PTR [eax]
  69:
        d9 c0
                                   fld
                                          st(0)
  6b:
        d9 e8
                                   fld1
                                   faddp
  6d:
        de c1
                                          st(1),st
  6f:
        d9 c9
                                   fxch
                                          st(1)
  71:
        d9 e8
                                   fld1
  73:
        de e1
                                   fsubp st(1),st
                                   fdivrp st(1),st
  75:
        de f9
  77:
        d9 ed
                                   fldln2
  79:
        d9 c9
                                   fxch
                                          st(1)
  7b:
        d9 f1
                                   fyl2x
  7d:
        d9 e8
                                   fld1
  7f:
        d9 e0
                                   fchs
  81:
        d9 c9
                                   fxch
                                          st(1)
  83:
        d9 fd
                                   fscale
                                   fstp
  85:
        dd d9
                                          st(1)
  87:
        9b df e0
                                   fstsw
                                          ax
```

fwait

eax,1

shr

```
8d:
      72 cc
                                jЬ
                                        5b < FpuArctanh@12+0x5b>
      f7 45 10 80 00 00 00
8f:
                                test
                                        DWORD PTR [ebp+0x10],0x80
96:
      74 05
                                jе
                                        9d < FpuArctanh@12+0x9d>
98:
      db 7d 8a
                                fstp
                                        TBYTE PTR [ebp-0x76]
9b:
      eb 1f
                                jmp
                                        bc < FpuArctanh@12+0xbc>
9d:
      8b 45 0c
                                mov
                                        eax,DWORD PTR [ebp+0xc]
a0:
      f7 45 10 00 00 10 00
                                test
                                        DWORD PTR [ebp+0x10],0x100000
a7:
      74 04
                                        ad < FpuArctanh@12+0xad>
                                jе
a9:
      d9 18
                                fstp
                                        DWORD PTR [eax]
ab:
      eb 0f
                                jmp
                                        bc < FpuArctanh@12+0xbc>
ad:
      f7 45 10 00 00 20 00
                                test
                                        DWORD PTR [ebp+0x10],0x200000
b4:
      74 04
                                jе
                                        ba < FpuArctanh@12+0xba>
b6:
      dd 18
                                fstp
                                        QWORD PTR [eax]
b8:
      eb 02
                                jmp
                                        bc < FpuArctanh@12+0xbc>
                                        TBYTE PTR [eax]
ba:
      db 38
                                fstp
bc:
      dd 65 94
                                frstor [ebp-0x6c]
bf:
      f7 45 10 01 00 00 00
                                test
                                        DWORD PTR [ebp+0x10],0x1
c6:
      74 02
                                jе
                                        ca < FpuArctanh@12+0xca>
c8:
      dd d8
                                fstp
                                        st(0)
ca:
      f7 45 10 80 00 00 00
                                test
                                        DWORD PTR [ebp+0x10],0x80
d1:
      74 05
                                jе
                                        d8 < FpuArctanh@12+0xd8>
d3:
      dd c7
                                ffree
                                        st(7)
d5:
      db 6d 8a
                                fld
                                        TBYTE PTR [ebp-0x76]
d8:
      0c 01
                                        al,0x1
da:
      c9
                                leave
db:
      c2 0c 00
                                ret
                                        0xc
```

FpuArctan.obj: file format pe-i386

```
00000000 < FpuArctan@12>:
   0:
                                  push
                                          ebp
   1:
        8b ec
                                  mov
                                          ebp,esp
   3:
        83 c4 88
                                  add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuArctan@12+0x1c>
        d9 e5
   f:
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9h
                                   fwait
  15:
        9e
                                  sahf
  16:
        73 04
                                   jae
                                          1c < FpuArctan@12+0x1c>
  18:
        7a 02
                                          1c < FpuArctan@12+0x1c>
                                  jр
  1a:
        74 42
                                   jе
                                          5e <_FpuArctan@12+0x5e>
  1c:
        9b dd 75 94
                                  fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                  test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                   jе
                                          31 <_FpuArctan@12+0x31>
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
        db 68 1c
                                          TBYTE PTR [eax+0x1c]
  2c:
                                   fld
        eb 38
  2f:
                                   jmp
                                          69 < FpuArctan@12+0x69>
  31:
        8b 45 08
                                  mov
                                          eax,DWORD PTR [ebp+0x8]
        f7 45 10 02 00 00 00
  34:
                                  test
                                          DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                          41 < FpuArctan@12+0x41>
  3d:
        db 28
                                   fld
                                          TBYTE PTR [eax]
 3f:
        eb 28
                                   jmp
                                          69 < FpuArctan@12+0x69>
 41:
        f7 45 10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
 48:
        74 04
                                          4e < FpuArctan@12+0x4e>
                                   jе
                                          QWORD PTR [eax]
  4a:
        dd 00
                                   fld
  4c:
        eb 1b
                                   jmp
                                          69 < FpuArctan@12+0x69>
  4e:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                          5b < FpuArctan@12+0x5b>
                                   jе
  57:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  59:
        eb 0e
                                   jmp
                                          69 < FpuArctan@12+0x69>
  5b:
        dd 65 94
                                   frstor [ebp-0x6c]
  5e:
        33 c0
                                  xor
                                          eax,eax
 60:
        c9
                                   leave
 61:
        c2 0c 00
                                   ret
 64:
        8b 45 08
                                          eax, DWORD PTR [ebp+0x8]
                                  mov
 67:
        db 28
                                  fld
                                          TBYTE PTR [eax]
```

```
69:
      d9 e8
                                 fld1
6b:
      d9 f3
                                 fpatan
6d:
      9b df e0
                                 fstsw
70:
      9b
                                 fwait
71:
      d1 e8
                                 shr
                                         eax,1
73:
      72 e6
                                 jЬ
                                         5b < FpuArctan@12+0x5b>
75:
      f7 45 10 20 00 00 00
                                 test
                                         DWORD PTR [ebp+0\times10],0\times20
7c:
      75 20
                                 jne
                                         9e < FpuArctan@12+0x9e>
7e:
      68 b4 00 00 00
                                 push
                                         0xb4
83:
      da 0c 24
                                 fimul
                                         DWORD PTR [esp]
86:
      d9 eb
                                 fldpi
88:
      de f9
                                 fdivrp st(1), st
8a:
      58
                                 pop
8b:
      d9 e4
                                 ftst
8d:
      9b df e0
                                 fstsw
                                         ax
90:
      9b
                                 fwait
91:
      9e
                                 sahf
92:
      73 0a
                                 jae
                                         9e < FpuArctan@12+0x9e>
94:
      68 68 01 00 00
                                 push
                                         0x168
99:
      da 04 24
                                 fiadd
                                         DWORD PTR [esp]
9c:
      9b
                                 fwait
9d:
      58
                                 pop
                                         eax
9e:
      f7 45 10 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x80
a5:
      74 05
                                 jе
                                         ac < FpuArctan@12+0xac>
                                         TBYTE PTR [ebp-0x76]
a7:
      db 7d 8a
                                 fstp
aa:
      eb 1f
                                 jmp
                                         cb < FpuArctan@12+0xcb>
ac:
      8b 45 0c
                                 mov
                                         eax, DWORD PTR [ebp+0xc]
af:
      f7 45 10 00 00 10 00
                                 test
                                         DWORD PTR [ebp+0x10],0x100000
b6:
      74 04
                                 jе
                                         bc < FpuArctan@12+0xbc>
b8:
      d9 18
                                 fstp
                                         DWORD PTR [eax]
ba:
      eb 0f
                                 jmp
                                         cb < FpuArctan@12+0xcb>
                                         DWORD PTR [ebp+0x10],0x200000
bc:
      f7 45
             10 00 00 20 00
                                 test
c3:
      74 04
                                 jе
                                         c9 < FpuArctan@12+0xc9>
c5:
      dd 18
                                 fstp
                                         QWORD PTR [eax]
c7:
      eb 02
                                 jmp
                                         cb < FpuArctan@12+0xcb>
                                         TBYTE PTR [eax]
c9:
      db 38
                                 fstp
cb:
      dd 65
                                 frstor [ebp-0x6c]
ce:
      f7 45 10 01 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x1
d5:
      74 02
                                 jе
                                         d9 < FpuArctan@12+0xd9>
d7:
      dd d8
                                 fstp
                                         st(0)
                                 test
d9:
      f7 45 10 80 00 00 00
                                         DWORD PTR [ebp+0x10],0x80
e0:
      74 05
                                 jе
                                         e7 < FpuArctan@12+0xe7>
e2:
      dd c7
                                 ffree
                                         st(7)
e4:
      db 6d 8a
                                 fld
                                         TBYTE PTR [ebp-0x76]
e7:
      0c 01
                                 or
                                         al,0x1
e9:
      c9
                                 leave
```

FpuArcsinh.obj: file format pe-i386

# Disassembly of section .text:

c2 0c 00

ea:

```
00000000 < FpuArcsinh@12>:
   0:
        55
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp,esp
                                          esp,0xffffff88
   3:
        83 c4 88
                                   add
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
                                          1c <_FpuArcsinh@12+0x1c>
   d:
        74 0d
                                   jе
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
  16:
        73 04
                                   jae
                                          1c < FpuArcsinh@12+0x1c>
        7a 02
  18:
                                          1c < FpuArcsinh@12+0x1c>
                                   jp
  1a:
        74 65
                                          81 < FpuArcsinh@12+0x81>
                                   jе
        9b dd 75 94
  1c:
                                   fsave
                                          [ebp-0x6c]
               10 01 00 00 00
  20:
        f7 45
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                          31 < FpuArcsinh@12+0x31>
                                   jе
  29:
        8d 45 94
                                   lea
                                          eax,[ebp-0x6c]
```

ret

0xc

```
2c:
      db 68 1c
                                 fld
                                         TBYTE PTR [eax+0x1c]
2f:
      eb 59
                                 jmp
                                         8a < FpuArcsinh@12+0x8a>
31:
      8b 45 08
                                 mov
                                         eax, DWORD PTR [ebp+0x8]
34:
      f7 45 10 02 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x2
3b:
      74 04
                                         41 < FpuArcsinh@12+0x41>
                                 jе
3d:
      db 28
                                 fld
                                         TBYTE PTR [eax]
3f:
      eb 49
                                 jmp
                                         8a < FpuArcsinh@12+0x8a>
41:
      f7 45
             10 00 00 02 00
                                 test
                                         DWORD PTR [ebp+0x10],0x20000
48:
      74 04
                                         4e < FpuArcsinh@12+0x4e>
                                 jе
4a:
      dd 00
                                 fld
                                         QWORD PTR [eax]
4c:
      eb 3c
                                 jmp
                                         8a < FpuArcsinh@12+0x8a>
4e:
      f7 45
             10 00 00 01 00
                                 test
                                         DWORD PTR [ebp+0x10],0x10000
55:
      74 04
                                 jе
                                         5b < FpuArcsinh@12+0x5b>
57:
      d9 00
                                 fld
                                         DWORD PTR [eax]
59:
      eb 2f
                                 jmp
                                         8a < FpuArcsinh@12+0x8a>
5b:
      f7 45
             10 04 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x4
62:
      74 04
                                 jе
                                         68 < FpuArcsinh@12+0x68>
64:
      db 00
                                 fild
                                         DWORD PTR [eax]
66:
      eb 22
                                 jmp
                                         8a < FpuArcsinh@12+0x8a>
68:
      f7 45
             10 00 00 00 01
                                 test
                                         DWORD PTR [ebp+0x10],0x1000000
6f:
      74 04
                                 jе
                                         75 < FpuArcsinh@12+0x75>
71:
      df 28
                                 fild
                                         QWORD PTR [eax]
73:
      eb 15
                                 jmp
                                         8a < FpuArcsinh@12+0x8a>
75:
      f7 45
             10 08 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x8
7c:
      75 09
                                 ine
                                         87 < FpuArcsinh@12+0x87>
7e:
      dd 65 94
                                 frstor [ebp-0x6c]
81:
      33 c0
                                 xor
                                         eax, eax
83:
      c9
                                 leave
84:
      c2 0c 00
                                 ret
                                         0xc
87:
      db 45 08
                                 fild
                                         DWORD PTR [ebp+0x8]
8a:
      d9 e4
                                 ftst
8c:
      9b df e0
                                 fstsw
                                        ax
8f:
      9b
                                 fwait
90:
      9e
                                 sahf
91:
      7a eb
                                 jр
                                         7e < FpuArcsinh@12+0x7e>
93:
      66 9c
                                 pushfw
95:
      d9 e1
                                 fabs
      d9 c0
97:
                                 fld
                                         st(0)
99:
      d8 c8
                                 fmul
                                         st, st(0)
9b:
      d9 e8
                                 fld1
9d:
      de c1
                                 faddp
                                        st(1),st
      d9 fa
9f:
                                 fsgrt
a1:
      de c1
                                 faddp
                                         st(1), st
a3:
      d9 ed
                                 fldln2
a5:
      d9 c9
                                 fxch
                                         st(1)
a7:
      d9 f1
                                 fyl2x
a9:
      66 9d
                                 popfw
ab:
      73 02
                                 jae
                                         af < FpuArcsinh@12+0xaf>
ad:
      d9 e0
                                 fchs
af:
      9b df e0
                                 fstsw
                                        ax
b2:
      9h
                                 fwait
b3:
      d1 e8
                                 shr
                                         eax,1
b5:
      72 c7
                                 jb
                                         7e < FpuArcsinh@12+0x7e>
b7:
      f7 45 10 80 00 00 00
                                 test
                                         DWORD PTR [ebp+0x10],0x80
be:
      74 05
                                 jе
                                         c5 < FpuArcsinh@12+0xc5>
c0:
      db 7d 8a
                                 fstp
                                         TBYTE PTR [ebp-0x76]
c3:
      eb 1f
                                 jmp
                                         e4 < FpuArcsinh@12+0xe4>
c5:
      8b 45 0c
                                 mov
                                         eax, DWORD PTR [ebp+0xc]
                                         DWORD PTR [ebp+0x10],0x100000
c8:
      f7 45 10 00 00 10 00
                                 test
cf:
      74 04
                                         d5 < FpuArcsinh@12+0xd5>
                                 jе
d1:
      d9 18
                                 fstp
                                         DWORD PTR [eax]
                                         e4 <_FpuArcsinh@12+0xe4>
d3:
      eb 0f
                                 jmp
d5:
      f7 45
             10 00 00 20 00
                                 test
                                         DWORD PTR [ebp+0x10],0x200000
dc:
      74 04
                                 jе
                                         e2 < FpuArcsinh@12+0xe2>
de:
      dd 18
                                 fstp
                                         QWORD PTR [eax]
e0:
      eb 02
                                 jmp
                                         e4 < FpuArcsinh@12+0xe4>
                                         TBYTE PTR [eax]
e2:
      db 38
                                 fstp
e4:
      dd 65 94
                                 frstor [ebp-0x6c]
            10 01 00 00 00
e7:
      f7 45
                                 test
                                         DWORD PTR [ebp+0\times10],0\times1
      74 02
                                         f2 < FpuArcsinh@12+0xf2>
ee:
                                 jе
```

```
f0:
       dd d8
                                  fstp
                                          st(0)
       f7 45 10 80 00 00 00
 f2:
                                  test
                                          DWORD PTR [ebp+0x10],0x80
f9:
       74 05
                                  jе
                                          100 < FpuArcsinh@12+0x100>
fb:
       dd c7
                                  ffree
                                          st(7)
                                          TBYTE PTR [ebp-0x76]
fd:
       db 6d 8a
                                  fld
100:
       0c 01
                                  or
                                          al,0x1
102:
       c9
                                  leave
103:
       c2 0c 00
                                  ret
                                          0xc
```

FpuArcsin.obj: file format pe-i386

```
00000000 < FpuArcsin@12>:
   0:
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp, esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
                                   jе
   d:
        74 0d
                                           1c < FpuArcsin@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                           ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                           1c < FpuArcsin@12+0x1c>
  18:
        7a 02
                                   jр
                                           1c < FpuArcsin@12+0x1c>
                                           5e < FpuArcsin@12+0x5e>
  1a:
        74 42
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
                                           DWORD PTR [ebp+0\times10],0\times1
  20:
        f7 45 10 01 00 00 00
                                   test
  27:
        74 08
                                   jе
                                           31 < FpuArcsin@12+0x31>
                                           eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
                                           TBYTE PTR [eax+0x1c]
  2c:
        db 68 1c
                                   fld
  2f:
        eb 38
                                   jmp
                                           69 < FpuArcsin@12+0x69>
  31:
        8b 45 08
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                           41 < FpuArcsin@12+0x41>
                                           TBYTE PTR [eax]
  3d:
        db 28
                                   fld
  3f:
        eb 28
                                   jmp
                                           69 < FpuArcsin@12+0x69>
  41:
        f7 45 10 00 00 02 00
                                   test
                                           DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                           4e < FpuArcsin@12+0x4e>
  4a:
        dd 00
                                   fld
                                           QWORD PTR [eax]
        eb 1b
  4c:
                                   jmp
                                           69 < FpuArcsin@12+0x69>
  4e:
        f7 45 10 00 00 01 00
                                   test
                                           DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                   jе
                                           5b < FpuArcsin@12+0x5b>
  57:
        d9 00
                                   fld
                                           DWORD PTR [eax]
  59:
        eb 0e
                                   jmp
                                           69 < FpuArcsin@12+0x69>
  5b:
        dd 65 94
                                   frstor [ebp-0x6c]
  5e:
        33 c0
                                   xor
                                           eax, eax
  60:
        c9
                                   leave
  61:
        c2 0c 00
                                   ret
                                           0xc
  64:
        8b 45 08
                                           eax, DWORD PTR [ebp+0x8]
                                   mov
  67:
        db 28
                                           TBYTE PTR [eax]
                                   fld
  69:
        d9 c0
                                   fld
                                           st(0)
  6b:
        d8 c8
                                   fmul
                                           st, st(0)
  6d:
        d9 e8
                                   fld1
  6f:
        de e1
                                   fsubp
                                           st(1),st
  71:
        d9 fa
                                   fsart
  73:
        d9 f3
                                   fpatan
        9b df e0
  75:
                                   fstsw
                                           ax
  78:
        9b
                                   fwait
  79:
        d1 e8
                                   shr
                                           eax,1
  7b:
        72 de
                                           5b < FpuArcsin@12+0x5b>
                                   jb
  7d:
        f7 45 10 20 00 00 00
                                   test
                                           DWORD PTR [ebp+0\times10],0\times20
                                           a6 <_FpuArcsin@12+0xa6>
  84:
        75 20
                                   jne
  86:
        68 b4 00 00 00
                                   push
                                           0xb4
  8b:
        da 0c 24
                                   fimul
                                           DWORD PTR [esp]
  8e:
        d9 eb
                                   fldpi
                                   fdivrp st(1),st
  90:
        de f9
  92:
        58
                                   pop
                                           eax
  93:
        d9 e4
                                   ftst
```

```
95:
      9b df e0
                                 fstsw
                                        ax
98:
      9b
                                 fwait
99:
      9e
                                 sahf
9a:
      73 0a
                                 jae
                                        a6 < FpuArcsin@12+0xa6>
9c:
      68 68 01 00 00
                                 push
                                        0x168
a1:
      da 04 24
                                 fiadd
                                        DWORD PTR [esp]
a4:
      9h
                                 fwait
a5:
      58
                                 gog
                                        DWORD PTR [ebp+0x10],0x80
a6:
      f7 45 10 80 00 00 00
                                 test
ad:
      74 05
                                        b4 < FpuArcsin@12+0xb4>
                                 jе
af:
      db 7d 8a
                                 fstp
                                        TBYTE PTR [ebp-0x76]
b2:
      eb 1f
                                 jmp
                                        d3 < FpuArcsin@12+0xd3>
b4:
      8b 45 0c
                                 mov
                                        eax, DWORD PTR [ebp+0xc]
b7:
      f7 45 10 00 00 10 00
                                 test
                                        DWORD PTR [ebp+0x10],0x100000
be:
      74 04
                                 jе
                                        c4 < FpuArcsin@12+0xc4>
c0:
      d9 18
                                 fstp
                                        DWORD PTR [eax]
c2:
      eb 0f
                                 jmp
                                        d3 < FpuArcsin@12+0xd3>
c4:
      f7 45 10 00 00 20 00
                                 test
                                        DWORD PTR [ebp+0x10],0x200000
cb:
      74 04
                                 jе
                                        d1 < FpuArcsin@12+0xd1>
cd:
      dd 18
                                 fstp
                                        QWORD PTR [eax]
cf:
      eb 02
                                 jmp
                                        d3 < FpuArcsin@12+0xd3>
                                        TBYTE PTR [eax]
d1:
      db 38
                                 fstp
d3:
      dd 65 94
                                 frstor [ebp-0x6c]
d6:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
dd:
      74 02
                                 jе
                                        e1 < FpuArcsin@12+0xe1>
df:
      dd d8
                                 fstp
                                        st(0)
e1:
      f7 45 10 80 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x80
e8:
      74 05
                                 jе
                                        ef < FpuArcsin@12+0xef>
ea:
      dd c7
                                 ffree
                                        st(7)
ec:
      db 6d 8a
                                 fld
                                        TBYTE PTR [ebp-0x76]
ef:
      0c 01
                                 or
                                        al,0x1
f1:
      c9
                                 leave
f2:
      c2 0c 00
                                        0xc
```

FpuArccosh.obj: file format pe-i386

```
00000000 < FpuArccosh@12>:
   0:
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                           1c < FpuArccosh@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                           1c < FpuArccosh@12+0x1c>
  18:
        7a 02
                                   jр
                                           1c <_FpuArccosh@12+0x1c>
  1a:
        74 65
                                   iе
                                           81 <_FpuArccosh@12+0x81>
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                   jе
                                           31 < FpuArccosh@12+0x31>
  29:
        8d 45 94
                                   lea
                                           eax,[ebp-0x6c]
  2c:
        db 68 1c
                                   fld
                                           TBYTE PTR [eax+0x1c]
                                   jmp
  2f:
        eb 59
                                           8a < FpuArccosh@12+0x8a>
  31:
        8b 45 08
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
                                           DWORD PTR [ebp+0\times10],0\times2
  34:
        f7 45 10 02 00 00 00
                                   test
  3b:
        74 04
                                           41 < FpuArccosh@12+0x41>
                                   jе
  3d:
        db 28
                                   fld
                                           TBYTE PTR [eax]
  3f:
        eb 49
                                   jmp
                                           8a < FpuArccosh@12+0x8a>
  41:
        f7 45 10 00 00 02 00
                                   test
                                           DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                           4e < FpuArccosh@12+0x4e>
                                           QWORD PTR [eax]
  4a:
        dd 00
                                   fld
  4c:
        eh 3c
                                   jmp
                                           8a < FpuArccosh@12+0x8a>
  4e:
        f7 45
               10 00 00 01 00
                                   test
                                           DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                           5b < FpuArccosh@12+0x5b>
                                   jе
  57:
        d9 00
                                   fld
                                           DWORD PTR [eax]
```

```
59:
      eb 2f
                                 jmp
                                        8a < FpuArccosh@12+0x8a>
5b:
      f7 45 10 04 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x4
62:
      74 04
                                 jе
                                        68 < FpuArccosh@12+0x68>
64:
      db 00
                                 fild
                                        DWORD PTR [eax]
66:
      eb 22
                                 jmp
                                        8a < FpuArccosh@12+0x8a>
68:
      f7 45 10 00 00 00 01
                                 test
                                        DWORD PTR [ebp+0x10],0x1000000
6f:
      74 04
                                jе
                                        75 < FpuArccosh@12+0x75>
71:
      df 28
                                 fild
                                        QWORD PTR [eax]
73:
      eb 15
                                 jmp
                                        8a < FpuArccosh@12+0x8a>
75:
      f7 45 10 08 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x8
7c:
      75 09
                                 jne
                                        87 < FpuArccosh@12+0x87>
7e:
      dd 65 94
                                 frstor [ebp-0x6c]
81:
      33 c0
                                xor
                                        eax, eax
83:
      c9
                                leave
84:
      c2 0c 00
                                 ret
                                        0xc
                                        DWORD PTR [ebp+0x8]
87:
      db 45 08
                                fild
8a:
      d9 c0
                                fld
                                        st(0)
8c:
      d8 c8
                                fmul
                                        st, st(0)
8e:
      d9 e8
                                fld1
90:
      de e9
                                fsubrp st(1),st
92:
      d9 fa
                                fsqrt
94:
      de c1
                                faddp
                                        st(1),st
96:
      d9 ed
                                fldln2
98:
      d9 c9
                                fxch
                                        st(1)
9a:
      d9 f1
                                 fyl2x
9c:
      9b df e0
                                fstsw
                                        ax
9f:
      9b
                                fwait
a0:
      d1 e8
                                shr
                                        eax,1
a2:
      72 da
                                jb
                                        7e < FpuArccosh@12+0x7e>
a4:
      f7 45 10 80 00 00 00
                                test
                                        DWORD PTR [ebp+0x10],0x80
ab:
      74 05
                                 jе
                                        b2 < FpuArccosh@12+0xb2>
                                        TBYTE PTR [ebp-0x76]
ad:
      db 7d 8a
                                 fstp
b0:
      eb 1f
                                jmp
                                        d1 < FpuArccosh@12+0xd1>
      8b 45 0c
                                        eax, DWORD PTR [ebp+0xc]
b2:
                                mov
b5:
      f7 45 10 00 00 10 00
                                test
                                        DWORD PTR [ebp+0x10],0x100000
bc:
      74 04
                                 jе
                                        c2 < FpuArccosh@12+0xc2>
be:
      d9
         18
                                 fstp
                                        DWORD PTR [eax]
c0:
      eb 0f
                                 jmp
                                        d1 < FpuArccosh@12+0xd1>
c2:
      f7 45 10 00 00 20 00
                                 test
                                        DWORD PTR [ebp+0x10],0x200000
c9:
      74 04
                                 jе
                                        cf < FpuArccosh@12+0xcf>
cb:
      dd 18
                                 fstp
                                        QWORD PTR [eax]
      eb 02
cd:
                                 jmp
                                        d1 <_FpuArccosh@12+0xd1>
      db 38
cf:
                                 fstp
                                        TBYTE PTR [eax]
                                frstor [ebp-0x6c]
d1:
      dd 65
            94
d4:
      f7 45 10 01 00 00 00
                                test
                                        DWORD PTR [ebp+0x10],0x1
db:
      74 02
                                 jе
                                        df < FpuArccosh@12+0xdf>
dd:
      dd d8
                                 fstp
                                        st(0)
df:
      f7 45 10 80 00 00 00
                                test
                                        DWORD PTR [ebp+0x10],0x80
      74 05
e6:
                                 jе
                                        ed < FpuArccosh@12+0xed>
                                 ffree
e8:
      dd c7
                                        st(7)
      db 6d 8a
                                        TBYTE PTR [ebp-0x76]
ea:
                                fld
      0c 01
ed:
                                or
                                        al,0x1
ef:
      c9
                                 leave
f0:
      c2 0c 00
                                 ret
                                        0xc
```

FpuArccos.obj: file format pe-i386

```
00000000 < FpuArccos@12>:
   0:
        55
                                   push
                                           ebp
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x10],0x1
                                           1c <_FpuArccos@12+0x1c>
   d:
        74 0d
                                   jе
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                           ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
```

```
73 04
16:
                                 jae
                                        1c < FpuArccos@12+0x1c>
18:
      7a 02
                                 jр
                                        1c < FpuArccos@12+0x1c>
1a:
      74 42
                                 jе
                                        5e < FpuArccos@12+0x5e>
1c:
      9b dd 75 94
                                 fsave
                                         [ebp-0x6c]
20:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
27:
      74 08
                                 jе
                                        31 < FpuArccos@12+0x31>
                                        eax, [ebp-0x6c]
29:
      8d 45 94
                                 lea
2c:
      db 68
             1c
                                 fld
                                        TBYTE PTR [eax+0x1c]
2f:
      eb 38
                                 jmp
                                        69 < FpuArccos@12+0x69>
31:
      8b 45 08
                                 mov
                                        eax, DWORD PTR [ebp+0x8]
34:
      f7 45 10 02 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x2
3b:
      74 04
                                 jе
                                        41 < FpuArccos@12+0x41>
3d:
      db 28
                                 fld
                                        TBYTE PTR [eax]
3f:
      eb 28
                                 jmp
                                        69 < FpuArccos@12+0x69>
41:
      f7 45
             10 00 00 02 00
                                 test
                                        DWORD PTR [ebp+0x10],0x20000
48:
      74 04
                                 jе
                                        4e < FpuArccos@12+0x4e>
                                        QWORD PTR [eax]
4a:
      dd 00
                                 fld
4c:
      eb 1b
                                 jmp
                                        69 < FpuArccos@12+0x69>
4e:
      f7 45
             10 00 00 01 00
                                 test
                                        DWORD PTR [ebp+0x10],0x10000
55:
      74 04
                                 jе
                                        5b < FpuArccos@12+0x5b>
57:
      d9 00
                                 fld
                                        DWORD PTR [eax]
59:
      eb 0e
                                 jmp
                                        69 < FpuArccos@12+0x69>
5b:
      dd 65
             94
                                 frstor [ebp-0x6c]
5e:
      33 c0
                                 xor
                                        eax, eax
60:
      c9
                                 leave
61:
      c2 0c 00
                                 ret
64:
      8b 45 08
                                 mov
                                        eax, DWORD PTR [ebp+0x8]
67:
      db 28
                                 fld
                                        TBYTE PTR [eax]
69:
      d9 c0
                                 fld
                                        st(0)
6b:
      d8 c8
                                 fmul
                                        st, st(0)
6d:
      d9 e8
                                 fld1
6f:
      de e1
                                 fsubp
                                        st(1),st
71:
      d9 fa
                                 fsgrt
      d9 c9
73:
                                 fxch
                                        st(1)
75:
      d9 f3
                                 fpatan
77:
      9b df e0
                                 fstsw
                                        ax
7a:
      9h
                                 fwait
7b:
      d1 e8
                                 shr
                                        eax,1
7d:
      72 dc
                                 jb
                                        5b < FpuArccos@12+0x5b>
7f:
      f7 45
             10 20 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x20
86:
      75
         0d
                                 jne
                                        95 < FpuArccos@12+0x95>
88:
      68 b4 00 00 00
                                 push
                                        0xb4
8d:
      da 0c 24
                                 fimul
                                        DWORD PTR [esp]
90:
      d9 eb
                                 fldpi
      de f9
92:
                                 fdivrp st(1), st
94:
      58
                                 pop
                                        eax
95:
      f7 45 10 80 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x80
      74 05
9c:
                                 jе
                                        a3 < FpuArccos@12+0xa3>
9e:
      db 7d 8a
                                 fstp
                                        TBYTE PTR [ebp-0x76]
a1:
      eb 1f
                                 jmp
                                        c2 < FpuArccos@12+0xc2>
      8b 45 0c
                                        eax, DWORD PTR [ebp+0xc]
a3:
                                 mov
      f7 45 10 00 00 10 00
                                        DWORD PTR [ebp+0x10],0x100000
a6:
                                 test
      74 04
ad:
                                 jе
                                        b3 < FpuArccos@12+0xb3>
af:
      d9 18
                                 fstp
                                        DWORD PTR [eax]
b1:
      eb 0f
                                 jmp
                                        c2 < FpuArccos@12+0xc2>
b3:
      f7 45 10 00 00 20 00
                                 test
                                        DWORD PTR [ebp+0x10],0x200000
ba:
      74 04
                                        c0 < FpuArccos@12+0xc0>
                                 jе
bc:
      dd 18
                                 fstp
                                        QWORD PTR [eax]
                                        c2 <_FpuArccos@12+0xc2>
be:
      eb 02
                                 jmp
c0:
      db 38
                                 fstp
                                        TBYTE PTR [eax]
                                 frstor [ebp-0x6c]
c2:
      dd 65 94
c5:
      f7 45 10 01 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x1
cc:
      74 02
                                        d0 < FpuArccos@12+0xd0>
                                 jе
                                 fstp
ce:
      dd d8
                                        st(0)
d0:
      f7 45 10 80 00 00 00
                                 test
                                        DWORD PTR [ebp+0x10],0x80
d7:
                                        de < FpuArccos@12+0xde>
      74 05
                                 1e
                                 ffree
d9:
      dd c7
                                        st(7)
db:
      db 6d 8a
                                 fld
                                        TBYTE PTR [ebp-0x76]
de:
      0c 01
                                        al,0x1
                                 or
e0:
      c9
                                 leave
```

e1: c2 0c 00 ret 0xc

FpuAdd.obj: file format pe-i386

```
00000000 < FpuAdd@16>:
   0:
        55
                                   push
   1:
        8b ec
                                   mov
                                           ebp,esp
   3:
        83 c4 88
                                   add
                                           esp,0xffffff88
   6:
        f7 45 14 01 01 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x101
   d:
        74 0d
                                   jе
                                           1c < FpuAdd@16+0x1c>
   f:
        d9 e5
                                   fxam
        9b df e0
  11:
                                   fstsw
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                           1c < FpuAdd@16+0x1c>
  18:
        7a 02
                                   jр
                                           1c < FpuAdd@16+0x1c>
        74 76
                                           92 < FpuAdd@16+0x92>
  1a:
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                           [ebp-0x6c]
  20:
        f7 45 14 01 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x1
  27:
        74 0b
                                   jе
                                           34 < FpuAdd@16+0x34>
                                           eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                           TBYTE PTR [eax+0x1c]
  2f:
        e9 80 00 00 00
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
  34:
        8b 45 08
                                   mov
                                           eax, DWORD PTR [ebp+0x8]
  37:
        f7 45 14 10 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x10
  3e:
        75 58
                                   ine
                                           98 < FpuAdd@16+0x98>
  40:
        f7 45 14 02 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x2
  47:
        74 04
                                   jе
                                           4d < FpuAdd@16+0x4d>
  49:
        db 28
                                   fld
                                           TBYTE PTR [eax]
  4b:
        eb 67
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
  4d:
        f7 45
               14 00 00 02 00
                                   test
                                           DWORD PTR [ebp+0x14],0x20000
                                           5a < FpuAdd@16+0x5a >
  54:
        74 04
                                   jе
  56:
        dd 00
                                   fld
                                           QWORD PTR [eax]
  58:
        eb 5a
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
  5a:
        f7 45
               14 00 00 01 00
                                   test
                                           DWORD PTR [ebp+0x14],0x10000
  61:
        74 04
                                   jе
                                           67 < FpuAdd@16+0x67>
  63:
        d9 00
                                   fld
                                           DWORD PTR [eax]
  65:
        eb 4d
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
  67:
        f7 45
               14 04 00 00 00
                                   test
                                           DWORD PTR [ebp+0x14],0x4
  6e:
        74 04
                                   jе
                                           74 < FpuAdd@16+0x74>
  70:
        db 00
                                   fild
                                           DWORD PTR [eax]
  72:
        eb 40
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
  74:
        f7 45
               14 00 00 00 01
                                   test
                                           DWORD PTR [ebp+0x14],0x1000000
  7b:
        74 04
                                   jе
                                           81 < FpuAdd@16+0x81>
                                           QWORD PTR [eax]
  7d:
        df
           28
                                   fild
  7f:
        eb 33
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
        f7 45
               14 08 00 00 00
                                   test
  81:
                                           DWORD PTR [ebp+0x14],0x8
  88:
        74 05
                                   jе
                                           8f < FpuAdd@16+0x8f>
        db 45 08
                                   fild
                                           DWORD PTR [ebp+0x8]
  8a:
  8d:
        eb 25
                                   jmp
                                           b4 < FpuAdd@16+0xb4>
  8f:
        dd 65 94
                                   frstor [ebp-0x6c]
  92:
        33 c0
                                   xor
                                           eax, eax
  94:
        c9
                                   leave
  95:
        c2 10 00
                                   ret
                                           0x10
  98:
        83 f8 01
                                   cmp
                                           eax,0x1
  9b:
        75 04
                                   jne
                                           a1 < FpuAdd@16+0xa1>
  9d:
        d9 eb
                                   fldpi
                                           b4 < FpuAdd@16+0xb4>
  9f:
        eb 13
                                   jmp
  a1:
        83 f8 02
                                   cmp
                                           eax,0x2
                                           8f < FpuAdd@16+0x8f>
  a4:
        75 e9
                                   jne
  a6:
        d9 e8
                                   fld1
        d9 ea
                                   fldl2e
  a8:
  aa:
        d8 e1
                                   fsub
                                           st, st(1)
  ac:
        d9 f0
                                   f2xm1
        d8 c1
                                   fadd
  ae:
                                           st, st(1)
  b0:
        d9 fd
                                   fscale
  b2:
        dd d9
                                   fstp
                                           st(1)
```

```
f7 45 14 00 01 00 00
 h4:
                                  test
                                          DWORD PTR [ebp+0\times14],0\times100
 bb:
       74 0b
                                  jе
                                          c8 < FpuAdd@16+0xc8>
                                          eax, [ebp-0x6c]
 bd:
       8d 45 94
                                  lea
 c0:
       db 68 1c
                                  fld
                                          TBYTE PTR [eax+0x1c]
 c3:
       e9 80 00 00 00
                                  jmp
                                          148 < FpuAdd@16+0x148>
 c8:
       8b 45 0c
                                  mov
                                          eax,DWORD PTR [ebp+0xc]
 cb:
       f7 45 14 00 10 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times1000
 d2:
       75
          54
                                  jne
                                          128 < FpuAdd@16+0x128>
                                          DWORDPTR [ebp+0x14],0x200
 d4:
       f7 45 14 00 02 00 00
                                  test
 db:
       74 04
                                          e1 < FpuAdd@16+0xe1>
                                  jе
 dd:
       db 28
                                  fld
                                          TBYTE PTR [eax]
 df:
       eb 67
                                  jmp
                                          148 < FpuAdd@16+0x148>
                                          DWORD PTR [ebp+0x14],0x80000
 e1:
       f7 45
              14 00 00 08 00
                                  test
 e8:
       74 04
                                  jе
                                          ee < FpuAdd@16+0xee>
 ea:
       dd 00
                                  fld
                                          QWORD PTR [eax]
 ec:
       eb
          5a
                                  jmp
                                          148 < FpuAdd@16+0x148>
                                          DWORD PTR [ebp+0x14],0x40000
 ee:
       f7 45
              14 00 00 04 00
                                  test
 f5:
       74 04
                                  jе
                                          fb < FpuAdd@16+0xfb>
                                          DWORD PTR [eax]
 f7:
       d9 00
                                  fld
 f9:
       eb 4d
                                  jmp
                                          148 < FpuAdd@16+0x148>
                                          DWORD PTR [ebp+0\times14],0\times400
 fb:
       f7 45
              14 00 04 00 00
                                  test
102:
       74 04
                                  jе
                                          108 < FpuAdd@16+0x108>
                                          DWORD PTR [eax]
104:
       db 00
                                  fild
106:
       eb 40
                                  jmp
                                          148 < FpuAdd@16+0x148>
                                          DWORD PTR [ebp+0x14],0x2000000
108:
       f7 45
              14 00 00 00 02
                                  test
10f:
       74 04
                                  jе
                                          115 < FpuAdd@16+0x115>
                                          QWORD PTR [eax]
111:
       df
          28
                                  fild
113:
       eb
          33
                                  jmp
                                          148 < FpuAdd@16+0x148>
                                          DWORD PTR [ebp+0x14],0x800
115:
       f7 45 14 00 08 00 00
                                  test
11c:
       74 05
                                  jе
                                          123 < FpuAdd@16+0x123>
                                          DWORD PTR [ebp+0xc]
11e:
       db 45 0c
                                  fild
121:
       eb 25
                                  jmp
                                          148 < FpuAdd@16+0x148>
                                          8f < FpuAdd@16+0x8f>
123:
       e9 67 ff ff ff
                                  jmp
128:
       83 f8 01
                                  cmp
                                          eax,0x1
12b:
       75
          04
                                  ine
                                          131 < FpuAdd@16+0x131>
12d:
       d9 eb
                                  fldpi
12f:
       eb
          17
                                  jmp
                                          148 < FpuAdd@16+0x148>
131:
       83
          f8 02
                                  cmp
                                          eax,0x2
134:
       0f 85 55 ff ff ff
                                  ine
                                          8f < FpuAdd@16+0x8f>
13a:
       d9 e8
                                  fld1
                                  fldl2e
13c:
       d9 ea
13e:
       d8 e1
                                  fsub
                                          st, st(1)
140:
       d9 f0
                                  f2xm1
142:
       d8 c1
                                  fadd
                                          st, st(1)
144:
       d9 fd
                                  fscale
146:
       dd d9
                                  fstp
                                          st(1)
148:
       de c1
                                  faddp
                                          st(1),st
14a:
       9b df e0
                                  fstsw
                                          ax
14d:
       9h
                                  fwait
14e:
       d1 e8
                                  shr
                                          eax,1
       0f 82 39 ff ff ff
150:
                                  jb
                                          8f < FpuAdd@16+0x8f>
       f7 45
              14 80 00 00 00
156:
                                  test
                                          DWORD PTR [ebp+0x14],0x80
15d:
       74 05
                                  ie
                                          164 <_FpuAdd@16+0x164>
15f:
       db 7d 8a
                                  fstp
                                          TBYTE PTR [ebp-0x76]
162:
       eb 1f
                                  jmp
                                          183 < FpuAdd@16+0x183>
164:
       8b 45
              10
                                  mov
                                          eax, DWORD PTR [ebp+0x10]
167:
       f7 45 14 00 00 10 00
                                  test
                                          DWORD PTR [ebp+0x14],0x100000
16e:
       74 04
                                          174 < FpuAdd@16+0x174>
                                  jе
                                          DWORD PTR [eax]
170:
       d9 18
                                  fstp
                                          183 <_FpuAdd@16+0x183>
172:
       eb 0f
                                  jmp
                                  test
                                          DWORD PTR [ebp+0x14],0x200000
174:
       f7 45
              14 00 00 20 00
17b:
       74 04
                                          181 < FpuAdd@16+0x181>
                                  jе
                                          QWORD PTR [eax]
17d:
       dd 18
                                  fstp
17f:
       eb 02
                                  jmp
                                          183 < FpuAdd@16+0x183>
181:
       db 38
                                  fstp
                                          TBYTE PTR [eax]
183:
       dd 65 94
                                  frstor [ebp-0x6c]
186:
       f7 45 14 01 01 00 00
                                  test
                                          DWORD PTR [ebp+0\times14],0\times101
18d:
       74 02
                                          191 < FpuAdd@16+0x191>
                                  jе
                                  fstp
18f:
       dd d8
                                          st(0)
191:
       f7 45 14 80 00 00 00
                                          DWORD PTR [ebp+0x14],0x80
                                  test
```

```
198:
       74 05
                                   jе
                                           19f < FpuAdd@16+0x19f>
19a:
       dd c7
                                   ffree
                                           st(7)
19c:
       db 6d 8a
                                   fld
                                           TBYTE PTR [ebp-0x76]
19f:
       0c 01
                                           al,0x1
1a1:
       c9
                                   leave
1a2:
       c2 10 00
                                   ret
                                           0x10
```

FpuAbs.obj: file format pe-i386

```
00000000 < FpuAbs@12>:
   0:
                                   push
                                          ebp
   1:
        8b ec
                                   mov
                                          ebp, esp
   3:
        83 c4 88
                                   add
                                          esp,0xffffff88
   6:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
   d:
        74 0d
                                   jе
                                          1c < FpuAbs@12+0x1c>
   f:
        d9 e5
                                   fxam
  11:
        9b df e0
                                   fstsw
                                          ax
  14:
        9b
                                   fwait
  15:
        9e
                                   sahf
        73 04
  16:
                                   jae
                                          1c < FpuAbs@12+0x1c>
  18:
        7a 02
                                   jр
                                          1c < FpuAbs@12+0x1c>
                                          5e < FpuAbs@12+0x5e>
  1a:
        74 42
                                   jе
  1c:
        9b dd 75 94
                                   fsave
                                          [ebp-0x6c]
  20:
        f7 45 10 01 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x1
  27:
        74 08
                                   jе
                                          31 < FpuAbs@12+0x31>
                                          eax, [ebp-0x6c]
  29:
        8d 45 94
                                   lea
  2c:
        db 68 1c
                                   fld
                                          TBYTE PTR [eax+0x1c]
  2f:
        eb 33
                                   jmp
                                          64 < FpuAbs@12+0x64>
  31:
        8b 45 08
                                   mov
                                          eax, DWORD PTR [ebp+0x8]
  34:
        f7 45 10 02 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x2
  3b:
        74 04
                                   jе
                                          41 <_FpuAbs@12+0x41>
                                          TBYTE PTR [eax]
  3d:
        db 28
                                   fld
  3f:
        eb 23
                                   jmp
                                          64 < FpuAbs@12+0x64>
  41:
        f7 45 10 00 00 02 00
                                   test
                                          DWORD PTR [ebp+0x10],0x20000
  48:
        74 04
                                   jе
                                          4e < FpuAbs@12+0x4e>
  4a:
        dd 00
                                   fld
                                          QWORD PTR [eax]
        eb 16
  4c:
                                   jmp
                                          64 <_FpuAbs@12+0x64>
  4e:
        f7 45 10 00 00 01 00
                                   test
                                          DWORD PTR [ebp+0x10],0x10000
  55:
        74 04
                                   jе
                                          5b < FpuAbs@12+0x5b>
  57:
        d9 00
                                   fld
                                          DWORD PTR [eax]
  59:
        eb 09
                                   jmp
                                          64 < FpuAbs@12+0x64>
  5b:
        dd 65 94
                                   frstor [ebp-0x6c]
  5e:
        33 c0
                                   xor
                                          eax,eax
  60:
        c9
                                   leave
  61:
        c2 0c 00
                                   ret
                                          0xc
  64:
        d9 e1
                                   fabs
        9b df e0
  66:
                                   fstsw
                                          ax
  69:
        9h
                                   fwait
  6a:
        d0 e8
                                   shr
                                          al,1
  6c:
        72 ed
                                   jb
                                          5b < FpuAbs@12+0x5b>
  6e:
        f7 45 10 80 00 00 00
                                   test
                                          DWORD PTR [ebp+0x10],0x80
  75:
        74 05
                                   jе
                                          7c < FpuAbs@12+0x7c>
  77:
        db 7d 8a
                                   fstp
                                          TBYTE PTR [ebp-0x76]
  7a:
        eb 1f
                                   jmp
                                          9b < FpuAbs@12+0x9b>
  7c:
        8b 45 0c
                                   mov
                                          eax, DWORD PTR [ebp+0xc]
  7f:
        f7 45 10 00 00 10 00
                                   test
                                          DWORD PTR [ebp+0x10],0x100000
  86:
        74 04
                                          8c < FpuAbs@12+0x8c>
                                   jе
  88:
        d9 18
                                   fstp
                                          DWORD PTR [eax]
  8a:
        eb 0f
                                   jmp
                                          9b < FpuAbs@12+0x9b>
  8c:
        f7 45 10 00 00 20 00
                                   test
                                          DWORD PTR [ebp+0x10],0x200000
  93:
        74 04
                                   jе
                                          99 < FpuAbs@12+0x99>
  95:
        dd 18
                                   fstp
                                          QWORD PTR [eax]
  97:
        eb 02
                                   jmp
                                          9b < FpuAbs@12+0x9b>
  99:
        db 38
                                   fstp
                                          TBYTE PTR [eax]
  9b:
                                   frstor [ebp-0x6c]
        dd 65 94
  9e:
        f7 45 10 01 00 00 00
                                          DWORD PTR [ebp+0\times10],0\times1
                                   test
  a5:
        74 02
                                          a9 < FpuAbs@12+0xa9>
                                   jе
```

```
a7:
      dd d8
                               fstp
                                       st(0)
      f7 45 10 80 00 00 00
                                       DWORD PTR [ebp+0x10],0x80
a9:
                               test
      74 05
                                       b7 <_FpuAbs@12+0xb7>
b0:
                               jе
                               ffree
b2:
      dd c7
                                       st(7)
                                       TBYTE PTR [ebp-0x76]
      db 6d 8a
b4:
                               fld
      0c 01
b7:
                                       al,0x1
                               or
b9:
      c9
                               leave
      c2 0c 00
                                       0xc
ba:
                               ret
```