

```

Using host libthread_db library "/lib64/libthread_db.so.1".
x0      0xffffffff7a28dc      281474884053212
x1      0xffffffff7a28d8      281474884053208
x2      0xffffffff7a28d4      281474884053204
x3      0x4007f4              4196340
x4      0xfffffa8bb4aa0       281473512589984
x5      0x4cd18e47aa65d63b    5535361855467673147
x6      0x0                   0
x7      0xfffffa8ae5000       281473511739392
x8      0xfffffa8810ae0       281473508772576
x9      0x7f7f7f7f7f7f7f7f    9187201950435737471
x10     0xfffffa8662fe8       281473507012584
x11     0x0                   0
x12     0xfffffa8bc2360       281473512645472
x13     0x0                   0
x14     0x2e                  46
x15     0x3d8f538             64550200
x16     0xfffffa880fd60       281473508769120
x17     0xfffffa8b936a0       281473512453792
x18     0xfffffa8ae60c0       281473511743680
x19     0xffffffa7a2a58       281474884053592
x20     0x1                   1
x21     0x41fdc0              4324800
x22     0x4007f4              4196340
x23     0xffffffa7a2a68       281474884053608
x24     0xfffffa8bc0b20       281473512639264
x25     0x0                   0
x26     0xfffffa8bc1000       281473512640512
x27     0x41fdc0              4324800
x28     0x0                   0
x29     0xffffffa7a28c0       281474884053184
x30     0x400914              4196628
sp      0xffffffa7a28c0       0xffffffa7a28c0
pc      0x400998              0x400998 <add_values>
cpsr    0x60000000           [ EL=0 BTYPE=0 C Z ]
fpsr    0x0                  [ ]
fpcr    0x0                  [ Len=0 Stride=0 RMode=0 ]
tpidr   0xfffffa8bb50a0       0xfffffa8bb50a0
tpidr2   0x0                  0x0
pauth_dmask 0x7f00000000000000 35747322042253312
pauth_cmask 0x7f00000000000000 35747322042253312

```

Breakpoint 1, `add_values ()` at `add_values.s:5`

```

5      stp fp, lr, [sp, #-16]!

```

(gdb) si

x0	0xffffffff7a28dc	281474884053212
x1	0xffffffff7a28d8	281474884053208
x2	0xffffffff7a28d4	281474884053204
x3	0x4007f4	4196340
x4	0xfffffa8bb4aa0	281473512589984
x5	0x4cd18e47aa65d63b	5535361855467673147
x6	0x0	0
x7	0xfffffa8ae5000	281473511739392
x8	0xfffffa8810ae0	281473508772576
x9	0x7f7f7f7f7f7f7f7f	9187201950435737471
x10	0xfffffa8662fe8	281473507012584
x11	0x0	0
x12	0xfffffa8bc2360	281473512645472
x13	0x0	0
x14	0x2e	46
x15	0x3d8f538	64550200
x16	0xfffffa880fd60	281473508769120
x17	0xfffffa8b936a0	281473512453792
x18	0xfffffa8ae60c0	281473511743680
x19	0xfffffa7a2a58	281474884053592
x20	0x1	1
x21	0x41fdc0	4324800
x22	0x4007f4	4196340
x23	0xffffffff7a2a68	281474884053608
x24	0xfffffa8bc0b20	281473512639264
x25	0x0	0
x26	0xfffffa8bc1000	281473512640512
x27	0x41fdc0	4324800
x28	0x0	0
x29	0xffffffff7a28c0	281474884053184
x30	0x400914	4196628
sp	0xffffffff7a28b0	0xffffffff7a28b0
pc	0x40099c	0x40099c <add_values+4>
cpsr	0x60200000	[EL=0 BTYPE=0 SS C Z]
fpsr	0x0	[]
fpcr	0x0	[Len=0 Stride=0 RMode=0]
tpidr	0xfffffa8bb50a0	0xfffffa8bb50a0
tpidr2	0x0	0x0
pauth_dmask	0x7f00000000000000	35747322042253312
pauth_cmask	0x7f00000000000000	35747322042253312

6 mov fp, sp

(gdb) si

x0	0xfffffffffa7a28dc	281474884053212
x1	0xfffffffffa7a28d8	281474884053208
x2	0xfffffffffa7a28d4	281474884053204
x3	0x4007f4	4196340
x4	0xfffffa8bb4aa0	281473512589984
x5	0x4cd18e47aa65d63b	5535361855467673147
x6	0x0	0
x7	0xfffffa8ae5000	281473511739392
x8	0xfffffa8810ae0	281473508772576
x9	0x7f7f7f7f7f7f7f7f	9187201950435737471
x10	0xfffffa8662fe8	281473507012584
x11	0x0	0
x12	0xfffffa8bc2360	281473512645472
x13	0x0	0
x14	0x2e	46
x15	0x3d8f538	64550200
x16	0xfffffa880fd60	281473508769120
x17	0xfffffa8b936a0	281473512453792
x18	0xfffffa8ae60c0	281473511743680
x19	0xfffffffffa7a2a58	281474884053592
x20	0x1	1
x21	0x41fdc0	4324800
x22	0x4007f4	4196340
x23	0xfffffffffa7a2a68	281474884053608
x24	0xfffffa8bc0b20	281473512639264
x25	0x0	0
x26	0xfffffa8bc1000	281473512640512
x27	0x41fdc0	4324800
x28	0x0	0
x29	0xfffffffffa7a28b0	281474884053168
x30	0x400914	4196628
sp	0xfffffffffa7a28b0	0xfffffffffa7a28b0
pc	0x4009a0	0x4009a0 <add_values+8>
cpsr	0x60200000	[EL=0 BTYPE=0 SS C Z]
fpsr	0x0	[]
fpcr	0x0	[Len=0 Stride=0 RMode=0]
tpidr	0xfffffa8bb50a0	0xfffffa8bb50a0
tpidr2	0x0	0x0
pauth_dmask	0x7f00000000000000	35747322042253312
pauth_cmask	0x7f00000000000000	35747322042253312

8 ldr w3, [x0]

```

(gdb) si
x0      0xfffffffffa7a28dc      281474884053212
x1      0xfffffffffa7a28d8      281474884053208
x2      0xfffffffffa7a28d4      281474884053204
x3      0x20                     32
x4      0xfffffa8bb4aa0         281473512589984
x5      0x4cd18e47aa65d63b     5535361855467673147
x6      0x0                      0
x7      0xfffffa8ae5000         281473511739392
x8      0xfffffa8810ae0         281473508772576
x9      0x7f7f7f7f7f7f7f7f     9187201950435737471
x10     0xfffffa8662fe8         281473507012584
x11     0x0                      0
x12     0xfffffa8bc2360         281473512645472
x13     0x0                      0
x14     0x2e                     46
x15     0x3d8f538               64550200
x16     0xfffffa880fd60         281473508769120
x17     0xfffffa8b936a0         281473512453792
x18     0xfffffa8ae60c0         281473511743680
x19     0xfffffffffa7a2a58     281474884053592
x20     0x1                      1
x21     0x41fdc0                4324800
x22     0x4007f4                4196340
x23     0xfffffffffa7a2a68     281474884053608
x24     0xfffffa8bc0b20         281473512639264
x25     0x0                      0
x26     0xfffffa8bc1000         281473512640512
x27     0x41fdc0                4324800
x28     0x0                      0
x29     0xfffffffffa7a28b0     281474884053168
x30     0x400914                4196628
sp      0xfffffffffa7a28b0     0xfffffffffa7a28b0
pc      0x4009a4                0x4009a4 <add_values+12>
cpsr    0x60200000              [ EL=0 BTYPE=0 SS C Z ]
fpsr    0x0                     [ ]
fpcr    0x0                     [ Len=0 Stride=0 RMode=0 ]
tpidr   0xfffffa8bb50a0         0xfffffa8bb50a0
tpidr2  0x0                     0x0
pauth_dmask 0x7f0000000000000 35747322042253312
pauth_cmask 0x7f0000000000000 35747322042253312

```

```

9      ldr w4, [x1]

```

(gdb) si

x0	0xffffffff7a28dc	281474884053212
x1	0xffffffff7a28d8	281474884053208
x2	0xffffffff7a28d4	281474884053204
x3	0x20	32
x4	0xa	10
x5	0x4cd18e47aa65d63b	5535361855467673147
x6	0x0	0
x7	0xfffffa8ae5000	281473511739392
x8	0xfffffa8810ae0	281473508772576
x9	0x7f7f7f7f7f7f7f7f	9187201950435737471
x10	0xfffffa8662fe8	281473507012584
x11	0x0	0
x12	0xfffffa8bc2360	281473512645472
x13	0x0	0
x14	0x2e	46
x15	0x3d8f538	64550200
x16	0xfffffa880fd60	281473508769120
x17	0xfffffa8b936a0	281473512453792
x18	0xfffffa8ae60c0	281473511743680
x19	0xffffffff7a2a58	281474884053592
x20	0x1	1
x21	0x41fdc0	4324800
x22	0x4007f4	4196340
x23	0xffffffff7a2a68	281474884053608
x24	0xfffffa8bc0b20	281473512639264
x25	0x0	0
x26	0xfffffa8bc1000	281473512640512
x27	0x41fdc0	4324800
x28	0x0	0
x29	0xffffffff7a28b0	281474884053168
x30	0x400914	4196628
sp	0xffffffff7a28b0	0xffffffff7a28b0
pc	0x4009a8	0x4009a8 <add_values+16>
cpsr	0x60200000	[EL=0 BTYPE=0 SS C Z]
fpsr	0x0	[]
fpcr	0x0	[Len=0 Stride=0 RMode=0]
tpidr	0xfffffa8bb50a0	0xfffffa8bb50a0
tpidr2	0x0	0x0
pauth_dmask	0x7f00000000000000	35747322042253312
pauth_cmask	0x7f00000000000000	35747322042253312

10 add w5, w3, w4

(gdb) si

x0	0xfffffffffa7a28dc	281474884053212
x1	0xfffffffffa7a28d8	281474884053208
x2	0xfffffffffa7a28d4	281474884053204
x3	0x20	32
x4	0xa	10
x5	0x2a	42
x6	0x0	0
x7	0xfffffffffa8ae5000	281473511739392
x8	0xfffffffffa8810ae0	281473508772576
x9	0x7f7f7f7f7f7f7f7f	9187201950435737471
x10	0xfffffffffa8662fe8	281473507012584
x11	0x0	0
x12	0xfffffffffa8bc2360	281473512645472
x13	0x0	0
x14	0x2e	46
x15	0x3d8f538	64550200
x16	0xfffffffffa880fd60	281473508769120
x17	0xfffffffffa8b936a0	281473512453792
x18	0xfffffffffa8ae60c0	281473511743680
x19	0xfffffffffa7a2a58	281474884053592
x20	0x1	1
x21	0x41fdc0	4324800
x22	0x4007f4	4196340
x23	0xfffffffffa7a2a68	281474884053608
x24	0xfffffffffa8bc0b20	281473512639264
x25	0x0	0
x26	0xfffffffffa8bc1000	281473512640512
x27	0x41fdc0	4324800
x28	0x0	0
x29	0xfffffffffa7a28b0	281474884053168
x30	0x400914	4196628
sp	0xfffffffffa7a28b0	0xfffffffffa7a28b0
pc	0x4009ac	0x4009ac <add_values+20>
cpsr	0x60200000	[EL=0 BTYPE=0 SS C Z]
fpsr	0x0	[]
fpcr	0x0	[Len=0 Stride=0 RMode=0]
tpidr	0xfffffffffa8bb50a0	0xfffffffffa8bb50a0
tpidr2	0x0	0x0
pauth_dmask	0x7f0000000000000	35747322042253312
pauth_cmask	0x7f0000000000000	35747322042253312

11 str w5, [x2]

(gdb) si

x0	0xffffffff7a28dc	281474884053212
x1	0xffffffff7a28d8	281474884053208
x2	0xffffffff7a28d4	281474884053204
x3	0x20	32
x4	0xa	10
x5	0x2a	42
x6	0x0	0
x7	0xfffffa8ae5000	281473511739392
x8	0xfffffa8810ae0	281473508772576
x9	0x7f7f7f7f7f7f7f7f	9187201950435737471
x10	0xfffffa8662fe8	281473507012584
x11	0x0	0
x12	0xfffffa8bc2360	281473512645472
x13	0x0	0
x14	0x2e	46
x15	0x3d8f538	64550200
x16	0xfffffa880fd60	281473508769120
x17	0xfffffa8b936a0	281473512453792
x18	0xfffffa8ae60c0	281473511743680
x19	0xfffffa7a2a58	281474884053592
x20	0x1	1
x21	0x41fdc0	4324800
x22	0x4007f4	4196340
x23	0xffffffff7a2a68	281474884053608
x24	0xfffffa8bc0b20	281473512639264
x25	0x0	0
x26	0xfffffa8bc1000	281473512640512
x27	0x41fdc0	4324800
x28	0x0	0
x29	0xfffffa7a28b0	281474884053168
x30	0x400914	4196628
sp	0xfffffa7a28b0	0xfffffa7a28b0
pc	0x4009b0	0x4009b0 <add_values+24>
cpsr	0x60200000	[EL=0 BTYPE=0 SS C Z]
fpsr	0x0	[]
fpcr	0x0	[Len=0 Stride=0 RMode=0]
tpidr	0xfffffa8bb50a0	0xfffffa8bb50a0
tpidr2	0x0	0x0
pauth_dmask	0x7f0000000000000	35747322042253312
pauth_cmask	0x7f0000000000000	35747322042253312

13 ldp fp, lr, [sp], #16

(gdb) si

x0	0xfffffa7a28dc	281474884053212
x1	0xfffffa7a28d8	281474884053208
x2	0xfffffa7a28d4	281474884053204
x3	0x20	32
x4	0xa	10
x5	0x2a	42
x6	0x0	0
x7	0xfffffa8ae5000	281473511739392
x8	0xfffffa8810ae0	281473508772576
x9	0x7f7f7f7f7f7f7f7f	9187201950435737471
x10	0xfffffa8662fe8	281473507012584
x11	0x0	0
x12	0xfffffa8bc2360	281473512645472
x13	0x0	0
x14	0x2e	46
x15	0x3d8f538	64550200
x16	0xfffffa880fd60	281473508769120
x17	0xfffffa8b936a0	281473512453792
x18	0xfffffa8ae60c0	281473511743680
x19	0xfffffa7a2a58	281474884053592
x20	0x1	1
x21	0x41fdc0	4324800
x22	0x4007f4	4196340
x23	0xfffffa7a2a68	281474884053608
x24	0xfffffa8bc0b20	281473512639264
x25	0x0	0
x26	0xfffffa8bc1000	281473512640512
x27	0x41fdc0	4324800
x28	0x0	0
x29	0xfffffa7a28c0	281474884053184
x30	0x400914	4196628
sp	0xfffffa7a28c0	0xfffffa7a28c0
pc	0x4009b4	0x4009b4 <add_values+28>
cpsr	0x60200000	[EL=0 BTYPE=0 SS C Z]
fpsr	0x0	[]
fpcr	0x0	[Len=0 Stride=0 RMode=0]
tpidr	0xfffffa8bb50a0	0xfffffa8bb50a0
tpidr2	0x0	0x0
pauth_dmask	0x7f000000000000	35747322042253312
pauth_cmask	0x7f000000000000	35747322042253312

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ret