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bfkwong@unix1:~/CPE315/finalize/armsim $ make all
g++ -g main.cpp decode.cpp thumbsim_driver.cpp parse.cpp execute.cpp -o thumbsim
bfkwong@unix1:~/CPE315/finalize/armsim $ make run
./thumbsim -i -d -f inputs/fib.sim
Starting at PC 83ec
push {r7, lr}
sub sp, #16
add r7, sp, #0
movs r3, #0
str r3, [r7, #12]
movs r3, #1
str r3, [r7, #8]
movs r3, #0
str r3, [r7, #4]
movs r3, #0
str r3, [r7, #0]
b 0x841a
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
```

```
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
```

```
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
```

```
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r2, [r7, #12]
ldr r3, [r7, #8]
adds r3, r2, r3
str r3, [r7, #4]
ldr r3, [r7, #8]
str r3, [r7, #12]
```

```
ldr r3, [r7, #4]
str r3, [r7, #8]
ldr r3, [r7, #0]
adds r3, #1
str r3, [r7, #0]
ldr r3, [r7, #0]
cmp r3, #9
ble 0x8404
ldr r3, [r7, #4]
adds r0, r3, #0
mov sp, r7
add sp, #16
pop {r7, pc}
DATA:
ffffffe8: a
ffffffec: 59
ffffff0: 59
ffffff4: 37
104ac: 83b8
104b0: 8390
104b8: 1
104bc: 1
104c0: c
104c4: 8274
104c8: d
104cc: 8494
104d0: 19
104d4: 104ac
104d8: 1b
104dc: 4
104e0: 1a
104e4: 104b0
104e8: 1c
104ec: 4
104f0: 6ffffef5
104f4: 818c
104f8: 5
104fc: 81f0
```

10500: 6
10504: 81b0
10508: a
1050c: 3c
10510: b
10514: 10
10518: 15
10520: 3
10524: 105a0
10528: 2
1052c: 18
10530: 14
10534: 11
10538: 17
1053c: 825c
10540: 11
10544: 8254
10548: 12
1054c: 8
10550: 13
10554: 8
10558: 6ffffffe
1055c: 8234
10560: 6ffffff
10564: 1
10568: 6ffffff0
1056c: 822c
105a0: 104b8
105ac: 8280
105b0: 8280
105b4: 8280
RF:
59
0
22
59
0
0

0
0
0
0
0
0
0
0
0
0

bfkwong@unix1:~/CPE315/finalize/armsim \$