

Program Code

File: `../y86-code/asum.yo` Load

Control

Address	Object code	Assembly code
0x0	30f40002000000000000	<code>irmovq stack, %rsp</code> # Set up stack pointer
0xa	80380000000000000000	<code>call main</code> # Execute main program
0x13	00	<code>halt</code> # Terminate program
0x18	0d000d000d000000	<code>array: .quad 0x000d000d000d</code>
0x20	c000c000c0000000	<code>.quad 0x00c000c000c0</code>
0x28	000b000b000b0000	<code>.quad 0x0b000b000b00</code>
0x30	00a000a000a00000	<code>.quad 0xa000a000a000</code>
0x38	30f71800000000000000	<code>main: irmovq array, %rdi</code>
0x42	30f60400000000000000	<code>irmovq \$4, %rsi</code>
0x4c	80560000000000000000	<code>call sum</code> # sum(array, 4)
0x55	90	<code>ret</code>
0x56	30f80800000000000000	<code>sum: irmovq \$8, %r8</code> # Constant 8
0x60	30f90100000000000000	<code>irmovq \$1, %r9</code> # Constant 1
0x6a	6300	<code>xorq %rax, %rax</code> # sum = 0
0x6c	6266	<code>andq %rsi, %rsi</code> # Set CC
0x6e	70870000000000000000	<code>jmp test</code> # Goto test
0x77	50a70000000000000000	<code>loop: mrmovq (%rdi), %r10</code> # Get *start
0x81	60a0	<code>addq %r10, %rax</code> # Add to sum
0x83	6087	<code>addq %r8, %rdi</code> # start++
0x85	6196	<code>subq %r9, %rsi</code> # count--. Set CC
0x87	74770000000000000000	<code>test: jne loop</code> # Stop when 0
0x90	90	<code>ret</code> # Return

Object code

Currently executing instructions

Assembly code