// The memory map in HEX:

//0x0 <main>:

201d1ffc // 0x0: addi $sp, $zero, 8188

201e1ffc // 0x4: addi $fp, $zero, 8188

34040004 // 0x8: ori $a0, $zero, 4

0c000005 // 0xc: jal fib

0800001f // 0x10: j end

//0x14 <fib>:

20090020 // 0x14: addi $t1, $zero, 32

03a9e822 // 0x18: sub $sp, $sp, $t1

afbf0014 // 0x1c: sw $ra, 20($sp)

afbe0010 // 0x20: sw $fp, 16($sp)

23be001c // 0x24: addi $fp, $sp, 28

afc40000 // 0x28: sw $a0, 0($fp)

8fc80000 // 0x2c: lw $t0, 0($fp)

30420000 // 0x30: andi $v0, $v0, 0

1008000d // 0x34: beq $t0, $zero, $L1

34020001 // 0x38: ori $v0, $zero, 1

1102000b // 0x3c: beq $v0, $t0, $L1

20090001 // 0x40: addi $t1, $zero, 1

01092022 // 0x44: sub $a0, $t0, $t1

0c000005 // 0x48: jal fib

afa2000c // 0x4c: sw $v0, 12($sp)

8fc80000 // 0x50: lw $t0, 0($fp)

20090002 // 0x54: addi $t1, $zero, 2

01092022 // 0x58: sub $a0, $t0, $t1

0c000005 // 0x5c: jal fib

8fb1000c // 0x60: lw $s1, 12($sp)

02221020 // 0x64: add $v0, $s1, $v0

0800001b // 0x68: j $L1

//0x6c <$L1>:

8fbf0014 // 0x6c: lw $ra, 20($sp)

8fbe0010 // 0x70: lw $fp, 16($sp)

23bd0020 // 0x74: addi $sp, $sp, 32

03e00008 // 0x78: jr $ra

//0x7c <end>:

0800001f // 0x7c: j end

// The memory map in HEX:

//20010001 // 0x0: addi 1, 0, 1

//00211020 // 0x4: add 2, 1, 1

//00411822 // 0x8: sub 3, 2, 1

//0022202a // 0xc: slt 4, 1, 2

//2045fffd // 0x10: addi 5, 2, -3

//30a5ff00 // 0x14: andi 5, 5, 65280

//34a5000f // 0x18: ori 5, 5, 15

//00a52820 // 0x1c: add 5, 5, 5

//20061000 // 0x20: addi 6, 0, 4096

//8cc70000 // 0x24: lw 7, 0($a2)

//00e24020 // 0x28: add 8, 7, 2

//acc80004 // 0x2c: sw 8, 4($a2)

//0041482a // 0x30: slt 9, 2, 1

//00a85025 // 0x34: or 10, 5, 8

//00c25827 // 0x38: nor 11, 6, 2

//340c0000 // 0x3c: ori 12, 0, 0

//340d0002 // 0x40: ori 13, 0, 2

//0x44 <LOOP>:

//11ac0015 // 0x44: beq 12, 13, DONE

//218c0001 // 0x48: addi 12, 12, 1

//218c0001 // 0x4c: addi 12, 12, 1

//218c0001 // 0x50: addi 12, 12, 1

//10000005 // 0x54: beq 0, 0, JUMP\_TEST

//218c0001 // 0x58: addi 12, 12, 1

//218c0001 // 0x5c: addi 12, 12, 1

//218c0001 // 0x60: addi 12, 12, 1

//218c0001 // 0x64: addi 12, 12, 1

//218c0001 // 0x68: addi 12, 12, 1

//0x6c <JUMP\_TEST>:

//218c0001 // 0x6c: addi 12, 12, 1

//08000020 // 0x70: j JUMP\_TARGET1

//218c0001 // 0x74: addi 12, 12, 1

//218c0001 // 0x78: addi 12, 12, 1

//218c0001 // 0x7c: addi 12, 12, 1

//0x80 <JUMP\_TARGET1>:

//218c0001 // 0x80: addi 12, 12, 1

//0c000028 // 0x84: jal SUBROUTINE

//08000023 // 0x88: j BNE\_TEST

//0x8c <BNE\_TEST>:

//340d0001 // 0x8c: ori 13, 0, 1

//14000002 // 0x90: bne 0, 0, DONE

//15a00001 // 0x94: bne 0, 13, DONE

//08000023 // 0x98: j BNE\_TEST

//0x9c <DONE>:

//08000027 // 0x9c: j DONE

//0xa0 <SUBROUTINE>:

//218c0001 // 0xa0: addi 12, 12, 1

//01816022 // 0xa4: sub 12, 12, 1

//03e00008 // 0xa8: jr 31

//fc000000 // 0xac: nop 0, 0, 0

//00429020 // 0xb0: add 18, 2, 2

//fc000000 // 0xb4: nop 0, 0, 0

//fc000000 // 0xb8: nop 0, 0, 0

//0x1000 <Data>:

// The label list is: {'JUMP\_TARGET1': '128', 'SUBROUTINE': '160', 'BNE\_TEST': '140', 'JUMP\_TEST': '108', 'DONE': '156', 'Data': '4096', 'LOOP': '68'}