

LAB B 2021 Z

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LAB_B Part 1

CODE:

```
ORG 8           //start at location 8

DD 15, 6, -5, 12, 3, 11, 0 //store variable in memory (0 at end is to reserve memory for X)

addi x1, x0, 8 //save the location at which the memory starts

ld x3, 0(x1)      //load all the variables from memory to register
ld x4, 8(x1)
ld x5, 16(x1)
ld x6, 24(x1)
ld x7, 32(x1)
ld x8, 40(x1)

add x10, x3, x8    //adds x3 and x8, then stores it to x10 ( $x3 + x8 = x10$ )
sub x11, x7, x6    //subtracts x6 from x7, then stores it to x11 ( $x7 - x6 = x11$ )
add x12, x4, x5    //adds x4 and x5, then stores it to x12 ( $x4 + x5 = x12$ )

sub x14, x10, x11  //subtracts x11 from x10, then stores it to x14 ( $x10 - x11 = x14$ )
sub x15, x12, x6   //subtracts x6 from x12, then stores it to x15 ( $x12 - x6 = x15$ )
add x16, x14, x15  //adds x14 and x15, then stores it to x16 ( $x14 + x15 = x16$ )

sd x16, 48(x1)    //replaces value 0 with x16 value from register to memory at location 48+8
(x1=8)

// full formula:    $x16 = (x3 + x8) - (x7 - x6) + (x4 + x5) - x6$ 
```

Program Screenshot 1 (after compile, before run):

RVS (RISC-V Visual Simulator) v0.3.9

File: /eecs/home/meet2610/Desktop/eecs2021/Lab2-Part1.a

ORG 8 //start at location 8
DD 15, 6, -5, 12, 3, 11, 0 //store variable in memory (0 at end is to reserve memory for X)
addi x1, x0, 8 //save the location at which the memory starts
ld x3, 0(x1) //Load all the variables from memory to register
ld x4, 8(x1)
ld x5, 16(x1)
ld x6, 24(x1)
ld x7, 32(x1)
ld x8, 40(x1)
add x10, x3, x8 //adds x3 and x8, then stores it to x10 (x3 + x8 = x10)
sub x11, x7, x6 //subtracts x6 from x7, then stores it to x11 (x7 - x6 = x11)
add x12, x4, x5 //adds x4 and x5, then stores it to x12 (x4 + x5 = x12)
sub x14, x10, x11 //subtracts x11 from x10, then stores it to x14 (x10 - x11 = x14)
sub x15, x12, x6 //subtracts x6 from x12, then stores it to x15 (x12 - x6 = x15)
add x16, x14, x15 //adds x14 and x15, then stores it to x16 (x14 + x15 = x16)
sd x16, 48(x1) //replaces value 0 with x16 value from register to memory at location 48+8 (x1+8)
// full formula: x16 = (x3 + x8) - (x7 - x6) + (x4 + x5) - x6

ASSEMBLY LISTING

ADDRESS	BIN/HEX CODE	HEX OPERANDS	INT OPERANDS
0x0000000000000008	DD 0x000000000000000f		
0x0000000000000010	DD 0x0000000000000006		
0x0000000000000018	DD 0xfffffffffffffffb		
0x0000000000000020	DD 0x000000000000000c		
0x0000000000000028	DD 0x0000000000000003		
0x0000000000000030	DD 0x000000000000000b		
0x0000000000000038	DD 0x0000000000000000		
0x0000000000000040	I 000000010000 0000 000 00001 0010011	addi x1 x0 0x008	addi x1,x0,8
0x0000000000000044	I 000000000000 00001 011 00011 0000011	ld x3 x1 0x000	ld x3,0(x1)
0x0000000000000048	I 000000001000 00001 011 00100 0000011	ld x4 x1 0x008	ld x4,8(x1)
0x000000000000004c	I 0000000010000 00001 011 00101 0000011	ld x5 x1 0x010	ld x5,16(x1)
0x0000000000000050	I 0000000010000 00001 011 00110 0000011	ld x6 x1 0x018	ld x6,24(x1)
0x0000000000000054	I 0000000100000 00001 011 00111 0000011	ld x7 x1 0x020	ld x7,32(x1)
0x0000000000000058	I 0000000101000 00001 011 01000 0000011	ld x8 x1 0x028	ld x8,40(x1)
0x000000000000005c	R 00000000 01000 00011 000 01010 0110011	add x10 x3 x8	add x10,x3,x8
0x0000000000000060	R 0100000 00110 00111 000 01011 0110011	sub x11 x7 x6	sub x11,x7,x6
0x0000000000000064	R 00000000 00101 00100 000 01100 0110011	add x12 x4 x5	add x12,x4,x5
0x0000000000000068	R 0100000 01011 01010 000 01110 0110011	sub x14 x10 x11	sub x14,x10,x11
0x000000000000006c	R 0100000 00110 01100 000 01111 0110011	sub x15 x12 x6	sub x15,x12,x6
0x0000000000000070	R 00000000 01111 01110 000 10000 0110011	add x16 x14 x15	add x16,x14,x15
0x0000000000000074	S 00000001 10000 00001 011 10000 0100011	sd x16 x1 0x030	sd x16,48(x1)

SYMBOL TABLE

0x0000000000000040 START

Compile BIN HEX INT TXT Source InitPC 0x0000000000000040 START Stop Run Next TXT Listing

Regs Refresh HEX INT FLP Memory Refresh HEX INT FLP TXT Execution Clear Cancel Enter INP

MEMORY

ADDRESS	HEX/DECIMAL	INTEGER
0x0000000000000008	0x000000000000000f	15
0x0000000000000010	0x0000000000000006	6
0x0000000000000018	0xfffffffffffffffb	-5
0x0000000000000020	0x000000000000000c	12
0x0000000000000028	0x0000000000000003	3
0x0000000000000030	0x000000000000000b	11
0x0000000000000038	0x0000000000000000	0

Clear OUT

Program Screenshot 2 (after run):

RVS (RISC-V Visual Simulator) v0.39

File: /eecs/home/meet2610/Desktop/eecs2021/Lab2-Part1.a

ORG 8 //start at location 8
DD 15, 6, -5, 12, 3, 11, 0 //store variable in memory (0 at end is to reserve memory for X)
addi x1, x0, 8 //save the location at which the memory starts
ld x3, 0(x1) //Load all the variables from memory to register
ld x4, 8(x1)
ld x5, 16(x1)
ld x6, 24(x1)
ld x7, 32(x1)
ld x8, 40(x1)
add x10, x3, x8 //adds x3 and x8, then stores it to x10 (x3 + x8 = x10)
sub x11, x7, x6 //subtracts x6 from x7, then stores it to x11 (x7 - x6 = x11)
add x12, x4, x5 //adds x4 and x5, then stores it to x12 (x4 + x5 = x12)
sub x14, x10, x11 //subtracts x11 from x10, then stores it to x14 (x10 - x11 = x14)
sub x15, x12, x6 //subtracts x6 from x12, then stores it to x15 (x12 - x6 = x15)
add x16, x14, x15 //adds x14 and x15, then stores it to x16 (x14 + x15 = x16)
sd x16, 48(x1) //replaces value 0 with x16 value from register to memory at location 48+8 (x1+8)
// full formula: x16 = (x3 + x8) - (x7 - x6) + (x4 + x5) - x6

ASSEMBLY LISTING

ADDRESS	BIN/HEX CODE	HEX OPERANDS	INT OPERANDS
0x0000000000000008	DD 0x000000000000000f		
0x0000000000000010	DD 0x0000000000000006		
0x0000000000000018	DD 0xfffffffffffffffb		
0x0000000000000020	DD 0x000000000000000c		
0x0000000000000028	DD 0x0000000000000003		
0x0000000000000030	DD 0x000000000000000b		
0x0000000000000038	DD 0x0000000000000000		
0x0000000000000040	I 000000010000 0000 000 00001 0010011	addi x1 x0 0x008	addi x1,x0,8
0x0000000000000044	I 000000000000 00001 011 00011 0000011	ld x3 x1 0x000	ld x3,0(x1)
0x0000000000000048	I 00000000010000 00001 011 00100 0000011	ld x4 x1 0x008	ld x4,8(x1)
0x000000000000004c	I 00000000010000 00001 011 00101 0000011	ld x5 x1 0x010	ld x5,16(x1)
0x0000000000000050	I 000000011000 00001 011 00110 0000011	ld x6 x1 0x018	ld x6,24(x1)
0x0000000000000054	I 000000100000 00001 011 00111 0000011	ld x7 x1 0x020	ld x7,32(x1)
0x0000000000000058	I 000000101000 00001 011 01000 0000011	ld x8 x1 0x028	ld x8,40(x1)
0x000000000000005c	R 0000000 01000 00011 000 01010 0110011	add x10 x3 x8	add x10,x3,x8
0x0000000000000060	R 0100000 00110 00111 000 01011 0110011	sub x11 x7 x6	sub x11,x7,x6
0x0000000000000064	R 0000000 00101 00100 000 01100 0110011	add x12 x4 x5	add x12,x4,x5
0x0000000000000068	R 0100000 01011 01010 000 01110 0110011	sub x14 x10 x11	sub x14,x10,x11
0x000000000000006c	R 0100000 00110 00100 000 01111 0110011	sub x15 x12 x6	sub x15,x12,x6
0x0000000000000070	R 0000000 01111 01110 000 10000 0110011	add x16 x14 x15	add x16,x14,x15
0x0000000000000074	S 0000001 10000 00001 011 10000 0100011	sd x16 x1 0x030	sd x16,48(x1)

SYMBOL TABLE

0x0000000000000040 START

Compile: BIN HEX INT TXT Source InitPC [0x0000000000000078] START Stop Run Next TXT Listing

REGS

REG	VALUE
x0	zero 0x0000000000000000 0
x1	ra 0x0000000000000000 0
x2	sp 0x0000000000000000 0
x3	gp 0x000000000000000f 15
x4	tp 0x0000000000000006 6
x5	t0 0xfffffffffffffffb -5
x6	t1 0x000000000000000c 12
x7	t2 0x0000000000000003 3
x8	s0 0x000000000000000b 11
x9	s1 0x0000000000000000 0
x10	a0 0x000000000000001a 26
x11	a1 0xfffffffffffffffb -9
x12	a2 0x0000000000000001 1
x13	a3 0x0000000000000000 0
x14	a4 0x0000000000000023 35
x15	a5 0xfffffffffffffffb -11
x16	a6 0x0000000000000010 24
x17	a7 0x0000000000000000 0
x18	s2 0x0000000000000000 0
x19	s3 0x0000000000000000 0
x20	s4 0x0000000000000000 0
x21	s5 0x0000000000000000 0
x22	s6 0x0000000000000000 0
x23	s7 0x0000000000000000 0
x24	s8 0x0000000000000000 0
x25	s9 0x0000000000000000 0
x26	s10 0x0000000000000000 0
x27	s11 0x0000000000000000 0
x28	t3 0x0000000000000000 0
x29	t4 0x0000000000000000 0
x30	t5 0x0000000000000000 0

MEMORY

ADDRESS	HEX/DECIMAL	INTEGER
0x0000000000000008	0x000000000000000f	15
0x0000000000000010	0x0000000000000006	6
0x0000000000000018	0xfffffffffffffffb	-5
0x0000000000000020	0x000000000000000c	12
0x0000000000000028	0x0000000000000003	3
0x0000000000000030	0x000000000000000b	11
0x0000000000000038	0x0000000000000000	0
0x0000000000000040	0x000000000000001a	26
0x0000000000000044	0x0000000000000000	0
0x0000000000000048	0x0000000000000000	0
0x000000000000004c	0x0000000000000000	0
0x0000000000000050	0x0000000000000000	0
0x0000000000000054	0x0000000000000000	0
0x0000000000000058	0x0000000000000000	0
0x000000000000005c	0x0000000000000000	0
0x0000000000000060	0x0000000000000000	0
0x0000000000000064	0x0000000000000000	0
0x0000000000000068	0x0000000000000000	0
0x000000000000006c	0x0000000000000000	0
0x0000000000000070	0x0000000000000000	0
0x0000000000000074	0x0000000000000000	0
0x0000000000000078	0x0000000000000000	0

RUN

ADDRESS	HEX/DECIMAL	INTEGER
0x0000000000000040	addi x1 x0 0x008	addi x1,x0,8
0x0000000000000044	ld x3 x1 0x000	ld x3,0(x1)
0x0000000000000048	ld x4 x1 0x008	ld x4,8(x1)
0x000000000000004c	ld x5 x1 0x010	ld x5,16(x1)
0x0000000000000050	ld x6 x1 0x018	ld x6,24(x1)
0x0000000000000054	ld x7 x1 0x020	ld x7,32(x1)
0x0000000000000058	ld x8 x1 0x028	ld x8,40(x1)
0x000000000000005c	add x10 x3 x8	add x10,x3,x8
0x0000000000000060	sub x11 x7 x6	sub x11,x7,x6
0x0000000000000064	add x12 x4 x5	add x12,x4,x5
0x0000000000000068	sub x14 x10 x11	sub x14,x10,x11
0x000000000000006c	sub x15 x12 x6	sub x15,x12,x6
0x0000000000000070	add x16 x14 x15	add x16,x14,x15
0x0000000000000074	sd x16 x1 0x030	sd x16,48(x1)
0x0000000000000078	NO INSTRUCTION	

Clear OUT

Refresh HEX INT FLP Regs Refresh HEX INT FLP TXT Memory Clear Execution Cancel Enter INP

LAB_B Part 2

CODE:

```
ORG 8//start at location 8

DD 12, 3, 11, 0 //store variable in memory (0 at end is to reserve memory for X)

addi x1, x0, 8 //save the location at which the memory starts

addi x3, x0, 15 //add the variables to register
addi x4, x0, 6
addi x5, x0, -5

ld x6, 0(x1) //load the variables from memory to register
ld x7, 8(x1)
ld x8, 16(x1)

add x10, x3, x8 //adds x3 and x8, then stores it to x10 ( $x3 + x8 = x10$ )
sub x11, x7, x6 //subtracts x6 from x7, then stores it to x11 ( $x7 - x6 = x11$ )
add x12, x4, x5 //adds x4 and x5, then stores it to x12 ( $x4 + x5 = x12$ )

sub x14, x10, x11 //subtracts x11 from x10, then stores it to x14 ( $x10 - x11 = x14$ )
sub x15, x12, x6 //subtracts x6 from x12, then stores it to x15 ( $x12 - x6 = x15$ )
add x16, x14, x15 //adds x14 and x15, then stores it to x16 ( $x14 + x15 = x16$ )

sd x16, 24(x1) //replaces value 0 with x16 value from register to memory at location 48+8
(x1=8)

// full formula:  $x16 = (x3 + x8) - (x7 - x6) + (x4 + x5) - x6$ 
```

Program Screenshot 1 (after compile, before run)

RVS (RISC-V Visual Simulator) v0.39

File: /eecs/home/meet2610/Desktop/eecs2021/Lab2-Part2.a

ORG 8 //start at location 8
DD 12, 3, 11, 0 //store variable in memory (0 at end is to reserve memory for X)
addi x1, x0, 8 //save the location at which the memory starts
addi x3, x0, 15 //add the variables to register
addi x4, x0, 6
addi x5, x0, 5
ld x7, 0(x1) //load the variables from memory to register
ld x8, 16(x1)
add x10, x3, x8 //adds x3 and x8, then stores it to x10 (x3 + x8 = x10)
sub x11, x7, x6 //subtracts x6 from x7, then stores it to x11 (x7 - x6 = x11)
add x12, x4, x5 //adds x4 and x5, then stores it to x12 (x4 + x5 = x12)
sub x14, x10, x11 //subtracts x11 from x10, then stores it to x14 (x10 - x11 = x14)
sub x15, x12, x6 //subtracts x6 from x12, then stores it to x15 (x12 - x6 = x15)
add x16, x14, x15 //adds x14 and x15, then stores it to x16 (x14 + x15 = x16)
sd x16, 24(x1) //replaces value 0 with x16 value from register to memory at location 48+8 (x1=8)
// full formula: x16 = (x3 + x8) - (x7 - x6) + (x4 + x5) - x6

ASSEMBLY LISTING

ADDRESS	BIN/HEX CODE	HEX OPERANDS	INT OPERANDS
0x0000000000000008	DD 0x000000000000000c		
0x0000000000000010	DD 0x0000000000000003		
0x0000000000000018	DD 0x000000000000000b		
0x0000000000000020	DD 0x0000000000000000		
0x0000000000000028	I 000000010000 0000 000 00001 0010011	addi x1 x0 0x008	addi x1,x0,8
0x000000000000002c	I 000000011111 00000 000 00011 0010011	addi x3 x0 0x00f	addi x3,x0,15
0x0000000000000030	I 000000001110 00000 000 00100 0010011	addi x4 x0 0x006	addi x4,x0,6
0x0000000000000034	I 111111110011 00000 000 00101 0010011	addi x5 x0 0xffb	addi x5,x0,-5
0x0000000000000038	I 00000000000000 00001 011 00110 0000011	ld x6 x1 0x000	ld x6,0(x1)
0x000000000000003c	I 00000000010000 00001 011 00111 0000011	ld x7 x1 0x008	ld x7,8(x1)
0x0000000000000040	I 000000010000 00001 011 01000 0000011	ld x8 x1 0x010	ld x8,16(x1)
0x0000000000000044	R 00000000 01000 00011 000 01010 0110011	add x10 x3 x8	add x10,x3,x8
0x0000000000000048	R 01000000 00110 00111 000 01011 0110011	sub x11 x7 x6	sub x11,x7,x6
0x000000000000004c	R 00000000 00101 00100 000 01100 0110011	add x12 x4 x5	add x12,x4,x5
0x0000000000000050	R 01000000 01011 01010 000 01110 0110011	sub x14 x10 x11	sub x14,x10,x11
0x0000000000000054	R 01000000 00110 01100 000 01111 0110011	sub x15 x12 x6	sub x15,x12,x6
0x0000000000000058	R 00000000 01111 01110 000 10000 0110011	add x16 x14 x15	add x16,x14,x15
0x000000000000005c	S 00000000 10000 00001 011 11000 0100011	sd x16 x1 0x018	sd x16,24(x1)

SYMBOL TABLE

0x0000000000000028 START

Compile BIN HEX INT TXT Source InitPC 0x0000000000000028 START Stop Run Next TXT Listing

REGISTERS

REG	VALUE
x0	zero 0x0000000000000000
x1	ra 0x0000000000000000
x2	sp 0x0000000000000000
x3	gp 0x0000000000000000
x4	tp 0x0000000000000000
x5	t0 0x0000000000000000
x6	t1 0x0000000000000000
x7	t2 0x0000000000000000
x8	s0 0x0000000000000000
x9	s1 0x0000000000000000
x10	a0 0x0000000000000000
x11	a1 0x0000000000000000
x12	a2 0x0000000000000000
x13	a3 0x0000000000000000
x14	a4 0x0000000000000000
x15	a5 0x0000000000000000
x16	a6 0x0000000000000000
x17	a7 0x0000000000000000
x18	s2 0x0000000000000000
x19	s3 0x0000000000000000
x20	s4 0x0000000000000000
x21	s5 0x0000000000000000
x22	s6 0x0000000000000000
x23	s7 0x0000000000000000
x24	s8 0x0000000000000000
x25	s9 0x0000000000000000
x26	s10 0x0000000000000000
x27	s11 0x0000000000000000
x28	t3 0x0000000000000000
x29	t4 0x0000000000000000
x30	t5 0x0000000000000000

MEMORY

ADDRESS	HEXADCEIMAL	INTEGER
0x0000000000000008	0x000000000000000c	12
0x0000000000000010	0x0000000000000003	3
0x0000000000000018	0x000000000000000b	11
0x0000000000000020	0x0000000000000000	0

Refresh HEX INT FLP Regs Refresh HEX INT FLP TXT Memory Clear Execution Cancel Enter INP

Program Screenshot 2 (after run)

RVS (RISC-V Visual Simulator) v0.39

File: /eecs/home/meet2610/Desktop/eecs2021/Lab2-Part2.a

ORG 8 //start at location 8
DD 12, 3, 11, 0 //store variable in memory (0 at end is to reserve memory for X)
addi x1, x0, 8 //save the location at which the memory starts
addi x3, x0, 15 //add the variables to register
addi x4, x0, 6
addi x5, x0, -5
ld x7, 0(x1) //load the variables from memory to register
ld x8, 16(x1)
add x10, x3, x8 //adds x3 and x8, then stores it to x10 (x3 + x8 = x10)
sub x11, x7, x6 //subtracts x6 from x7, then stores it to x11 (x7 - x6 = x11)
add x12, x4, x5 //adds x4 and x5, then stores it to x12 (x4 + x5 = x12)
sub x14, x10, x11 //subtracts x11 from x10, then stores it to x14 (x10 - x11 = x14)
sub x15, x12, x6 //subtracts x6 from x12, then stores it to x15 (x12 - x6 = x15)
add x16, x14, x15 //adds x14 and x15, then stores it to x16 (x14 + x15 = x16)
sd x16, 24(x1) //replaces value 0 with x16 value from register to memory at location 48+8 (x1=8)
// full formula: x16 = (x3 + x8) - (x7 - x6) + (x4 + x5) - x6

ASSEMBLY LISTING
ADDRESS BIN/HEX CODE HEX OPERANDS INT OPERANDS
0x0000000000000008 DD 0x000000000000000c
0x0000000000000010 DD 0x0000000000000003
0x0000000000000018 DD 0x000000000000000b
0x0000000000000020 DD 0x0000000000000000
0x0000000000000028 I 000000001000 0000 000 00001 0010011 addi x1 x0 0x008 addi x1,x0,8
0x000000000000002c I 000000001111 00000 000 00011 0010011 addi x3 x0 0x00f addi x3,x0,15
0x0000000000000030 I 000000000110 00000 000 00100 0010011 addi x4 x0 0x006 addi x4,x0,6
0x0000000000000034 I 111111110111 00000 000 00101 0010011 addi x5 x0 0xffb addi x5,x0,-5
0x0000000000000038 I 000000000000 00001 011 00110 0000011 ld x6 x1 0x000 ld x6,0(x1)
0x000000000000003c I 0000000001000 00001 011 00111 0000011 ld x7 x1 0x008 ld x7,0(x1)
0x0000000000000040 I 000000010000 00001 011 01000 0000011 ld x8 x1 0x010 ld x8,16(x1)
0x0000000000000044 R 00000000 01000 00011 000 01010 0110011 add x10 x3 x8 add x10,x3,x8
0x0000000000000048 R 01000000 00110 00111 000 01011 0110011 sub x11 x7 x6 sub x11,x7,x6
0x000000000000004c R 00000000 00101 00100 000 01100 0110011 add x12 x4 x5 add x12,x4,x5
0x0000000000000050 R 01000000 01011 01010 000 01110 0110011 sub x14 x10 x11 sub x14,x10,x11
0x0000000000000054 R 01000000 00110 01100 000 01111 0110011 sub x15 x12 x6 sub x15,x12,x6
0x0000000000000058 R 00000000 01111 01110 000 10000 0110011 add x16 x14 x15 add x16,x14,x15
0x000000000000005c S 00000000 10000 00001 011 11000 0100011 sd x16 x1 0x018 sd x16,24(x1)
SYMBOL TABLE
0x0000000000000028 START

Compile BIN HEX INT TXT Source InitPC 0x0000000000000060 START Stop Run Next TXT Listing

REGISTERS
x0 zero 0x0000000000000000
x1 ra 0x0000000000000008
x2 sp 0x0000000000000000
x3 gp 0x000000000000000f 15
x4 tp 0x0000000000000006 6
x5 t0 0xfffffffffffb -5
x6 t1 0x000000000000000c 12
x7 t2 0x0000000000000003 3
x8 s0 0x000000000000000b 11
x9 s1 0x0000000000000000 0
x10 a0 0x000000000000001a 26
x11 a1 0xfffffffffff7 -9
x12 a2 0x0000000000000001 1
x13 a3 0x0000000000000000 0
x14 a4 0x0000000000000023 35
x15 a5 0xfffffffffff5 -11
x16 a6 0x0000000000000018 24
x17 a7 0x0000000000000000 0
x18 s2 0x0000000000000000 0
x19 s3 0x0000000000000000 0
x20 s4 0x0000000000000000 0
x21 s5 0x0000000000000000 0
x22 s6 0x0000000000000000 0
x23 s7 0x0000000000000000 0
x24 s8 0x0000000000000000 0
x25 s9 0x0000000000000000 0
x26 s10 0x0000000000000000 0
x27 s11 0x0000000000000000 0
x28 t3 0x0000000000000000 0
x29 t4 0x0000000000000000 0
x30 t5 0x0000000000000000 0

MEMORY
ADDRESS HEXADECIMAL INTEGER
0x0000000000000008 0x000000000000000c 12
0x0000000000000010 0x0000000000000003 3
0x0000000000000018 0x000000000000000b 11
0x0000000000000020 0x0000000000000000 24

RUN
0x0000000000000028 addi x1 x0 0x008 addi x1, x0
0x000000000000002c addi x3 x0 0x00f addi x3, x0
0x0000000000000030 addi x4 x0 0x006 addi x4, x0
0x0000000000000034 addi x5 x0 0xffb addi x5, x0
0x0000000000000038 ld x6 x1 0x000 ld x6, 0(x1)
0x000000000000003c ld x7 x1 0x008 ld x7, 0(x1)
0x0000000000000040 ld x8 x1 0x010 ld x8, 16(x1)
0x0000000000000044 add x10 x3 x8 add x10, x3
0x000000000000004c add x12 x4 x5 add x12, x4
0x0000000000000050 sub x14 x10 x11 sub x14, x10
0x0000000000000054 sub x15 x12 x6 sub x15, x12
0x0000000000000058 add x16 x14 x15 add x16, x14
0x000000000000005c sd x16 x1 0x018 sd x16, 24(x1)
0x0000000000000060: NO INSTRUCTION

Refresh HEX INT FLP Regs Refresh HEX INT FLP TXT Memory Clear Execution Cancel Enter INP