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Assignment 3

1. srl $s0, $s1, $s3 (3, 16, 2)

$s1 = 16 → 00010000

$s0 = 4 → 00000100

the result $s0=4, $s1=16, $s2=2

2.

$t[3] = t[2] + a$

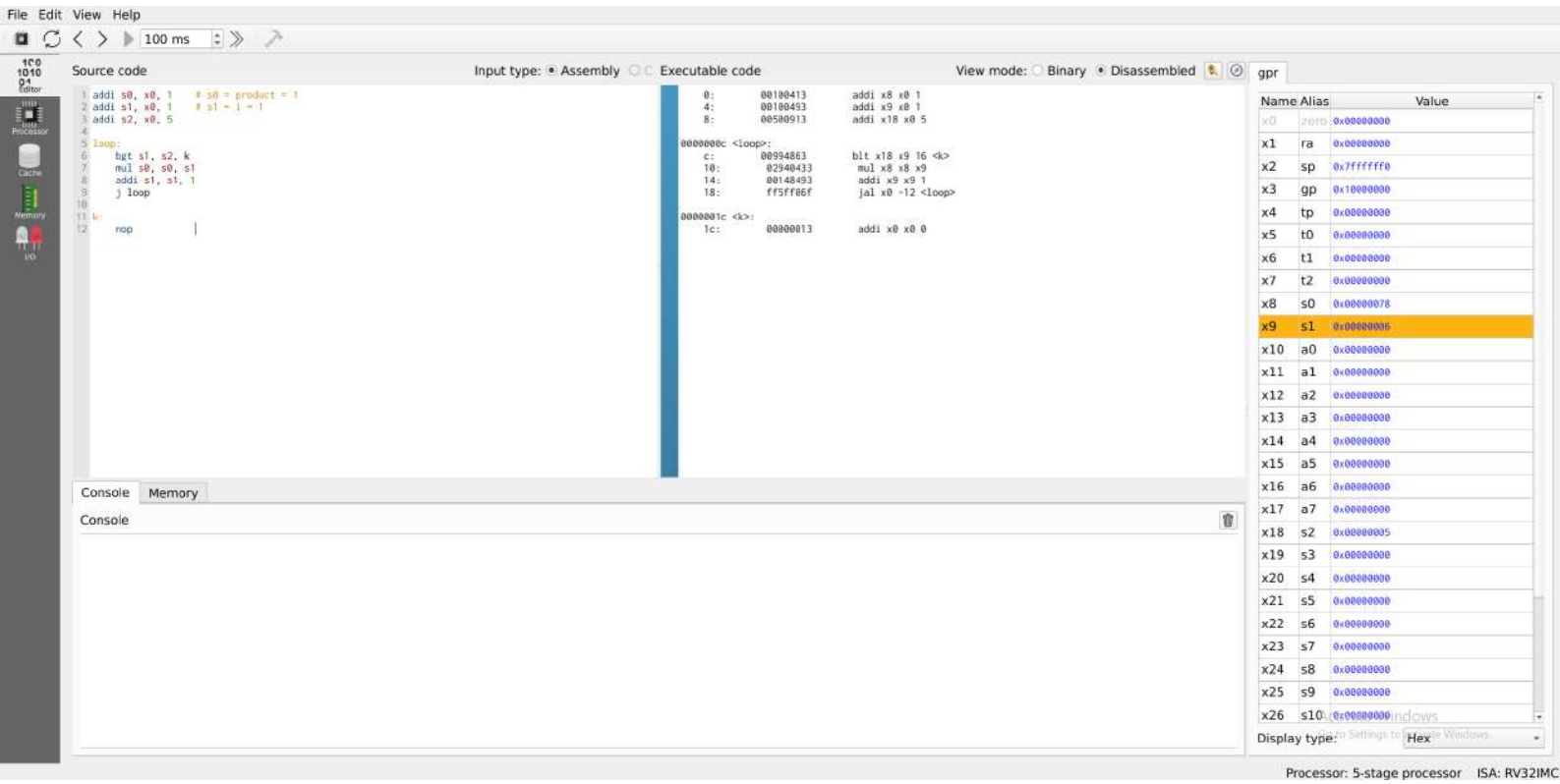
$a = 3 = 0000\ 0011$

$t[3] = 1111\ 1010 + 0000\ 0011$

$= 1111\ 1101$

word address

0	//	//	//	0001 1001
1	//	//	//	0001 1110
2	//	//	//	1111 1010
3	//	//	//	1111 1101


File Edit View Help
100 ms
Source code
Input type: Assembly C Executable code
View mode: Binary Disassembled
gpr
addi s0, x0, 1 # s0 = product = 1
addi s1, x0, 1 # s1 = i = 1
addi s2, x0, 5
loop:
bgt s1, s2, k
mul s0, s0, s1
addi s1, s1, 1
j loop
k:
nop
0: 00100413 addi x8 x0 1
4: 00100493 addi x9 x0 1
8: 00500913 addi x18 x0 5
0000000c <loop>:
c: 00994863 blt x18 x9 16 <k>
10: 02940433 mul x8 x8 x9
14: 00148493 addi x9 x9 1
18: ff5ff06f jal x0 -12 <loop>
0000001c <k>:
1c: 00000013 addi x0 x0 0
Console
Memory
Console
Name Alias Value
x0 zero 0x00000000
x1 ra 0x00000000
x2 sp 0x7ffffff0
x3 gp 0x10000000
x4 tp 0x00000000
x5 t0 0x00000000
x6 t1 0x00000000
x7 t2 0x00000000
x8 s0 0x00000078
x9 s1 0x00000006
x10 a0 0x00000000
x11 a1 0x00000000
x12 a2 0x00000000
x13 a3 0x00000000
x14 a4 0x00000000
x15 a5 0x00000000
x16 a6 0x00000000
x17 a7 0x00000000
x18 s2 0x00000005
x19 s3 0x00000000
x20 s4 0x00000000
x21 s5 0x00000000
x22 s6 0x00000000
x23 s7 0x00000000
x24 s8 0x00000000
x25 s9 0x00000000
x26 s10 0x00000000
Display type: Hex
Processor: 5-stage processor ISA: RV32IMC