1.

add $t4, $t2, $t2

Current PC	= 0x4000 000C
Next PC	= 0x4000 0010
Instruction[31:26]	= 000000
Instruction[25:21]	= 01010
Instruction[20:16]	= 01011
Instruction[15:11]	= 01100
Instruction[15:0]	= 0x6020
Instruction[5:0]	= 100000
Instruction[25:0]	= 0x14B 6020
ALU A Input	= 0x0000 0001
ALU B Input	= 0x0800 0011
ALU Zero Output	= No
Data Mem. Address	= 0x0000 0000
Data Mem. Write Data	= 0x0000 0000
Jump Address[31:0]	= 0x4000 0010

2.

sw $t4, 0xFFFFC($t3)

Current PC	= 0x4000 0010
Next PC	= 0x4000 0014
Instruction[31:26]	= 101011
Instruction[25:21]	= 01100
Instruction[20:16]	= 01011
Instruction[15:11]	= 11111
Instruction[15:0]	= 0xFFFC
Instruction[5:0]	= 111100
Instruction[25:0]	= 0x18B FFFC
ALU A Input	= 0x0000 FFFC
ALU B Input	= 0x0800 0010
ALU Zero Output	= No
Data Mem. Address	= 0x0000 0000
Data Mem. Write Data	= 0x0801 000C
Jump Address[31:0]	= 0x4000 0014

3.

lw $t0, 0xFFFFC($t3)

Current PC	= 0x4000 0014
Next PC	= 0x4000 0018
Instruction[31:26]	= 100011
Instruction[25:21]	= 01000
Instruction[20:16]	= 01011
Instruction[15:11]	= 11111
Instruction[15:0]	= 0xFFFC
Instruction[5:0]	= 111100
Instruction[25:0]	= 0x10B FFFC
ALU A Input	= 0x0000 FFFC
ALU B Input	= 0x0800 0010
ALU Zero Output	= No
Data Mem. Address	= 0x0801 000C
Data Mem. Write Data	= 0x0000 0000
Jump Address[31:0]	= 0x4000 0018

4.

beq $t2, $t3, Top

Current PC	= 0x4000 0018
Next PC	= 0x4000 001C
Instruction[31:26]	= 000100
Instruction[25:21]	= 01010
Instruction[20:16]	= 01011
Instruction[15:11]	= 11111
Instruction[15:0]	= 0xFFFC
Instruction[5:0]	= 111010
Instruction[25:0]	= 0x14B FFFC
ALU A Input	= 0x0000 0001
ALU B Input	= 0x0800 0010
ALU Zero Output	= No
Data Mem. Address	= 0x0000 0000
Data Mem. Write Data	= 0x0000 0000
Jump Address[31:0]	= 0x4000 000C

5.

j Top

Current PC	= 0x4000 001C
Next PC	= 0x4000 0020
Instruction[31:26]	= 000010
Instruction[25:21]	= 00000
Instruction[20:16]	= 00000
Instruction[15:11]	= 00000
Instruction[15:0]	= 0x0003
Instruction[5:0]	= 000011
Instruction[25:0]	= 0x000 0003
ALU A Input	= 0x0000 0000
ALU B Input	= 0x0000 0000
ALU Zero Output	= No
Data Mem. Address	= 0x0000 0000
Data Mem. Write Data	= 0x0000 0000
Jump Address[31:0]	= 0x4000 000C