

CYCLE	Instruction Retired	Reason
1	lbi r0, 0	
2	lbi r5, 43	
3	Lbi r6, 43	
4	Lbi r7, 43	
5	Ld r1, r0, 0	
6	nop	R1 needs to get the value of of mem[r0] before the st r5, r1, r0 instruction
7	nop	Same reason
8	St r5, r1, 0	
9	Ld r1, r0, 2	
10	nop	R1 needs to get the value of mem[r0 + 2] before the st r6, r1, 1 instruction
11	nop	Same reason
12	St r6, r1, 1	
13	Ld r1, r0, 4	
14	nop	R1 needs to get the value of mem[r0 + 4] before the st r7, r1, 1 instruction
15	nop	Same reason
16	St r7, r1, 1	
17	halt	