cycle	Instruction Retired	Reason
1	nop	No instruction retired
2	nop	No instruction retired
3	nop	No instruction retired
4	nop	No instruction retired
5	lbi r0, 0	
6	lbi r5, 0	
7	lbi r6, 43	
8	lbi r7, 43	
9	ld r1, r0, 0	
10	nop	r1 depends on previous instruction, we have MEM-EX forwarding, so stall 1 cycle
11	st r5, r1, 0	
12	ld r1, r0, 2	
13	nop	r1 depends on previous instruction, we have MEM-EX forwarding, so stall 1 cycle
14	st r6, r1, 1	
15	ld r1, r0, 4	
16	nop	r1 depends on previous instruction, we have MEM-EX forwarding, so stall 1 cycle
17	st r7, r1, 1	
18	halt	