

Cycle	Instruction Retired	Reason
1	nop	rst asserted
2	nop	rst asserted
3	nop	no instruction yet (pipeline not finished)
4	nop	no instruction yet (pipeline not finished)
5	nop	no instruction yet (pipeline not finished)
6	nop	no instruction yet (pipeline not finished)
7	nop	no instruction yet (pipeline not finished)
8	lbi r0, 0	Pipeline filled, no hazard
9	lbi r5, 43	Pipeline filled, no hazard
10	lbi r6, 43	Pipeline filled, no hazard
11	lbi r7, 43	Pipeline filled, no hazard
12	ld r1, r0, 0	Pipeline filled, no hazard
13	nop	RAW Hazard between r1 and r1, need to stall
14	nop	RAW Hazard between r1 and r1, need to stall
15	nop	RAW Hazard between r1 and r1, need to stall
16	st r5, r1, 0	RAW hazard resolved
17	ld r1, r0, 2	pipeline filled, no hazard
18	nop	RAW Hazard between r1 and r1, need to stall
19	nop	RAW Hazard between r1 and r1, need to stall
20	nop	RAW Hazard between r1 and r1, need to stall
21	st r6, r1, 1	RAW hazard resolved
22	ld r1, r0, r4	pipeline filled, no hazard
23	nop	RAW Hazard between r1 and r1, need to stall
24	nop	RAW Hazard between r1 and r1, need to stall
25	nop	RAW Hazard between r1 and r1, need to stall
26	st r7, r1, 1	RAW hazard resolved
27	halt	program stopped