

1 perf-test-dep-ldst.asm

```
lbi    r0, 0
lbi    r5, 43
lbi    r6, 43
lbi    r7, 43
ld     r1, r0, 0
st     r5, r1, 0
ld     r1, r0, 2
st     r6, r1, 1
ld     r1, r0, 4
st     r7, r1, 1
halt
```

2 Behavior

Cycle	Instruction Retired	Reason
1	nop	First instruction at Fetch Stage
2	nop	First instruction at decode stage
3	nop	First instruction at execute stage
4	nop	First instruction at mem stage
5	lbi r0, 0	First instruction written back
6	lbi r5, 43	
7	lbi r6, 43	
8	lbi r7, 43	
9	ld r1, r0, 0	
10	nop	r0 + 0 was calculated, need stall here to fetch memory at addr.
11	st r5, r1, 0	
12	ld r1, r0, 2	r0 + 2 was calculated, need stall here to fetch memory at addr.
13	nop	
14	st r6, r1, 1	
15	ld r1, r0, 4	
16	nop	r0 + 4 was calculated, need stall here to fetch memory at addr.
17	st r7, r1, 1	
18	halt	

3 Waveform

