

Write a microcode fragment that computes sums four words stored in memory locations 1000, 1004, 1008, and 1012. Store the average at memory location 1012.

<i>cycle</i>	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>rwe</i>	<i>im en</i>	<i>im va</i>	<i>au en</i>	<i>-a/s</i>	<i>lu en</i>	<i>lf</i>	<i>su en</i>	<i>st</i>	<i>ld en</i>	<i>st en</i>	<i>r/-w</i>	<i>msel</i>	<i>description</i>
1	X	X	1	1	1	1000	0	X	1	C	0	X	0	0	X	0	R1 ← 1000
2	1	X	2	1	0	X	0	X	0	X	0	X	1	0	1	1	R2 ← (R1)
3	1	X	1	1	1	4	1	0	0	X	0	X	0	0	X	0	R1 ← R1 + 4
4	1	X	3	1	0	X	0	X	0	X	0	X	1	0	1	1	R3 ← (R1)
5	2	3	2	1	0	X	1	0	0	X	0	X	0	0	X	0	R2 ← R2 + R3
6	1	X	1	1	1	4	1	0	0	X	0	X	0	0	X	0	R1 ← R1 + 4
7	1	X	3	1	0	X	0	X	0	X	0	X	1	0	1	1	R3 ← (R1)
8	2	3	2	1	0	X	1	0	0	X	0	X	0	0	X	0	R2 ← R2 + R3
9	1	X	1	1	1	4	1	0	0	X	0	X	0	0	X	0	R1 ← R1 + 4
7	1	X	3	1	0	X	0	X	0	X	0	X	1	0	1	1	R3 ← (R1)
8	2	3	2	1	0	X	1	0	0	X	0	X	0	0	X	0	R2 ← R2 + R3
9	2	X	2	1	1	2	0	X	0	X	1	1	0	0	X	0	R2 ← R2 asf 2
10	1	2	X	0	0	X	0	X	0	X	0	X	0	1	0	1	(R1) ← R2