

Instr.	ALU			OP <sub>1</sub>	OP <sub>2</sub>	RES <sub>1</sub>	RES <sub>2</sub>	REG. INTERFACE					
1	0	0	0	1	0	0	0	0	1	0	1	0	0
2	0	0	0	0	1	0	0	0	1	1	1	0	1
3	0	0	1	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	1	1	0	0	1	0	0

**Figure 8.9** An example horizontal microcode program that consists of four instructions with thirteen bits per instruction. Each instruction corresponds to a step listed in Figure 8.8.