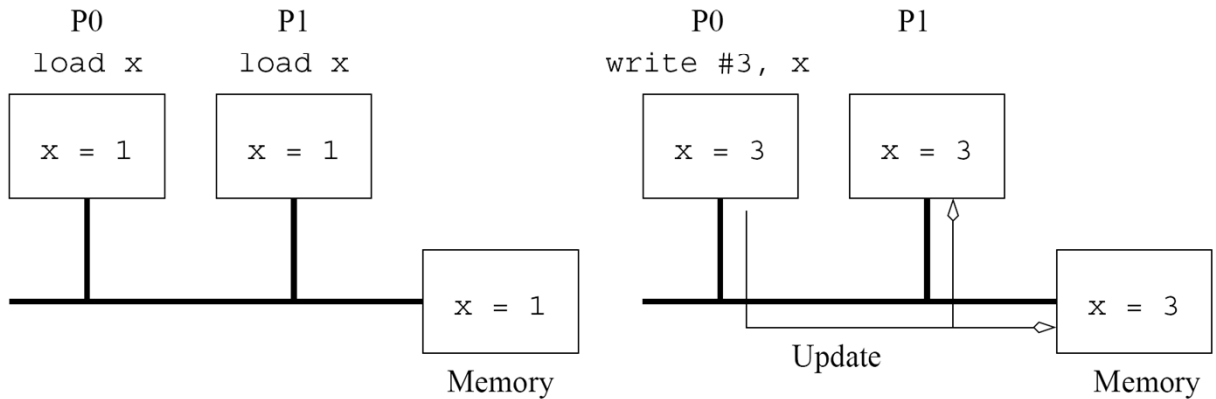


(a)



(b)

Figure 2.21 Cache coherence in multiprocessor systems: (a) Invalidate protocol; (b) Update protocol for shared variables.