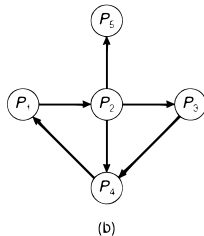
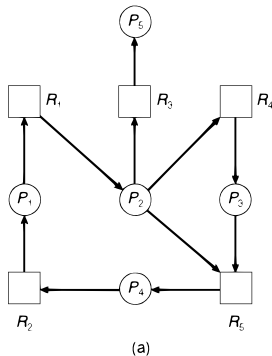


Deadlock Detection

Single Instance of Each Resource Type — Wait-for Graph



- ▶ $P_i \rightarrow P_j$ if P_i is waiting for P_j ;
- ▶ Periodically invoke an algorithm that searches for a cycle in the graph. If there is a cycle, there exists a deadlock.
- ▶ An algorithm to detect a cycle in a graph requires an order of n^2 operations, where n is the number of vertices in the graph.