Process P

Step	Action
p_0	Request (D)
p_1	Lock (D)
p_2	Request (T)
p_3	Lock (T)
p_4	Perform function
p_5	Unlock (D)
n _c	Unlock (T)

Process Q

Step	Action
\mathbf{q}_0	Request (T)
q_1	Lock (T)
q_2	Request (D)
q_3	Lock (D)
q_4	Perform function
q_5	Unlock (T)
q_6	Unlock (D)

Figure 6.4 Example of Two Processes Competing for Reusable Resources

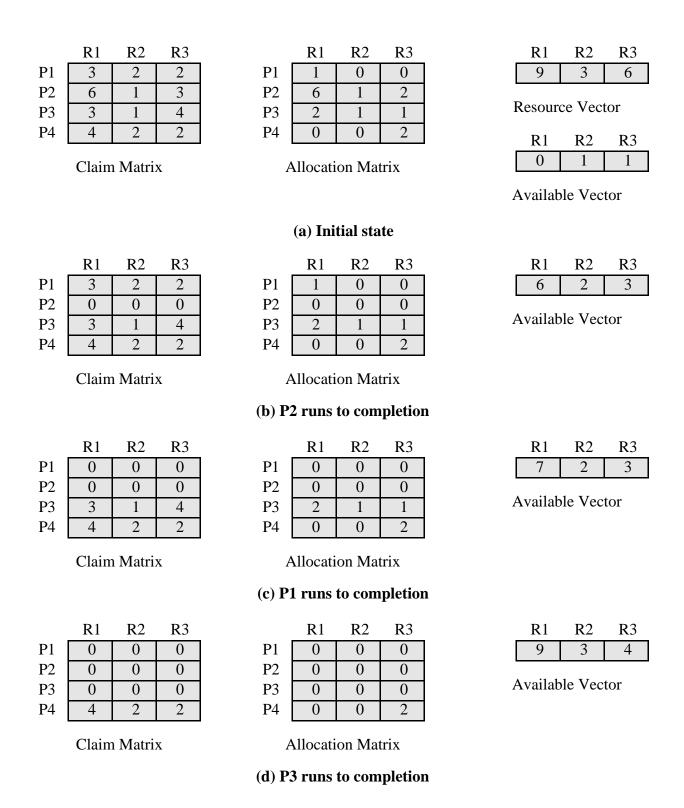


Figure 6.6 Determination of a Safe State

	R1	R2	R3		R1	R2	R3		R1	R2	R3
P1	3	2	2	P1	1	0	0		9	3	6
P2	6	1	3	P2	5	1	1		Resour	se Vect	or
P3	3	1	4	Р3	2	1	1		Resource Vector		
P4	4	2	2	P4	0	0	2		D.1	Da	D.O
	Claim Matrix				Allocation Matrix				R1	R2	R3
									Availab	le Vec	tor
(a) Initial state											
	R1	R2	R3		R1	R2	R3		R1	R2	R3
P1	3	2	2	P1	2	0	1		0	1	1
P2	6	1	3	P2	5	1	1		A '1 1	1 37	
P3	3	1	4	P3	2	1	1		Availab	le Vec	tor
P4	4	2	2	P4	0	0	2				
Claim Matrix				A	Allocati	on Mat	rix	•			

(b) P1 requests one unit each of R1 and R3 $\,$

Figure 6.7 Determination of an Unsafe State