

**Example:** Consider a system that contains five processes P1, P2, P3, P4, P5 and the three resource types A, B and C. Following are the resources types: A has 10, B has 5 and the resource type C has 7 instances.

Process	Allocation			Max			Available		
	A	B	C	A	B	C	A	B	C
P1	0	1	0	7	5	3	3	3	2
P2	2	0	0	3	2	2			
P3	3	0	2	9	0	2			
P4	2	1	1	2	2	2			
P5	0	0	2	4	3	3			

**Answer the following questions using the banker's algorithm:**

1. What is the reference of the need matrix?
2. Determine if the system is safe or not.
3. What will happen if the resource request (1, 0, 0) for process P1 can the system accept this request immediately?