

Activity 4

Consider the following snapshot of a system:

	Allocation Matrix	Max
	A B C D	A B C D
T ₀	0 1 2 0	2 4 3 1
T ₁	0 1 1 2	2 4 2 4
T ₂	1 2 4 0	3 6 5 1
T ₃	3 1 2 0	1 2 6 2
T ₄	1 0 0 1	3 1 1 2

Using the banker's algorithm, determine whether or not each of the following states is unsafe. If the state is safe, illustrate the order in which the threads may complete. Otherwise, illustrate why the state is unsafe.

- a. Available = (2, 2, 2, 3)
- b. Available = (4, 4, 1, 1)
- c. Available = (3, 0, 1, 4)
- d. Available = (1, 5, 2, 2)