## Assignment #05

1. Consider the scenario that there are five processes in the system, i.e., P<sub>0</sub>, P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>. A, B, C, and D represent four resource types and the following table is the snapshot of a system. Please find the physical meanings of the Allocation, Max, and Available matrixes in Slide M05b.

	Allocation	Max	Available
	ABCD	ABCD	ABCD
P <sub>0</sub>	0 0 1 2	0 0 1 2	1 5 2 0
P <sub>1</sub>	1000	1 7 5 0	
P <sub>2</sub>	1 3 5 4	2 3 5 6	
P <sub>3</sub>	0 6 3 2	0 6 5 2	
P <sub>4</sub>	0 0 1 4	0656	

Q: Is the system in a safe state? If yes, please provide one possible safe sequence; if not, please explain the reason. You may use the **banker's algorithm.**