Test Problems

6.1 Consider the snapshot of a system.

Process	Allocation	Max	Available
P_0	010	753	332
P_1	200	322	
P_2	302	902	
P_3	211	222	
P_4	002	433	

Answer the following question using the banker's Algorithm

a. What is the content of matrix need?
b. Is the system in safe state?
c. If a request for process P_1arrives for (1,0,2) can the request be granted immediately?

6.2 There are 3 resources and 3 processes in a system.

Availability Table

Resources	Quantity
A	3
B	2
C	1

The quantities of resources requested by the processes are as follows:

Request Table:

Process->	**1**	**2**	**3**
Res A	2	2	1
Res B	1	1	2
Res C	1	1	0

The resources allocated by the system are as follows:

Allocation Table:

Process	**1**	**2**	**3**
Res A	1	2	0
Res B	1	0	1
Res C	0	1	0

Is the system in a deadlock? If yes, then what are the process(es) that need to be pre-empted and in what order, to ensure that deadlock is overcome?