Suppose we have a system with four resource types, A, B, C and D and 5 processes, P0, P1, P2, P3 and P4. At a given point in time the allocations and maximal demands and each of the resources is given by:

	Allocation				Max			
	A	B	C	D	A	B	C	D
P_0	2	0	0	1	4	2	1	2
P_1	3	1	2	1	5	2	5	2
P_2	2	1	0	3	2	3	1	6
P_3	1	3	1	2	1	4	2	4
P_4	1	4	3	2	3	6	6	5

The available resources of each type at this point is time is given by:

Available			
A	B	C	D
3	3	2	1

(i) Is this a safe state? If it is, give a safe sequence.
(ii) Suppose that P1 makes a request for (1, 1, 0, 0) should that request be granted?
(iii) Suppose that P4 makes a request for (0, 0, 2, 0), should that request be   granted.