Practice

	Allocation				Max			Available	
	A	В	C	A	В	C	A	В	C
P ₀	1	0	1	2	1	1	2	1	1
Pı	2	1	2	5	4	4			
P_2	3	0	0	3	1	1			
P ₃	1	0	1	1	1	1			

Available:

A	В	С
2	1	1

Finish:

F F F

	Allocation		Max			Need			
	A	В	С	A	В	С	A	В	С
Ро	1	0	1	2	1	1	1	1	0
P1	2	1	2	5	4	4	3	3	2
P2	3	0	0	3	1	1	0	1	1
Р3	1	0	1	1	1	1	0	1	0

Work:

A	В	С
2	1	1

Step 1: Work= {2, 1, 1}

As Need[P0] = {1, 1, 0 } < Work => Process P0 is selected. So, Work + Allocation [P0] = { 2, 1, 1 } +{ 1, 0, 1 } ={ 3, 1, 2 } Work:

		A		В		С	
		2		1		1	
Po	+		1		0	1	•
Work=		3		1	1		

Finish Array:

Т	F	F	F
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As Need[P1] = (3, 3, 2) > Work => Process P1 is not selected.

Work Array remains same.

Finish Array:

T F	F	F
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Step 3: Work= {3, 1, 2}

As Need[P2] = (0, 1, 1) < Work => Process P2 is selected.

New Work Array is -

Work + Allocation [P2]= $\{3, 1, 2\} + \{3, 0, 0\} = \{6, 1, 2\}$

Work:

	Α		В		С	
	3		1		1	
P2 +		3		0	0	
Work=		6		1	2	

Finish Array:

т	F	Т	F
1	Г	1	Г

Step 4: Work= {6, 1, 2}

As Need[P3] = (0, 1, 0) < Work => Process P3 is selected.

New Work Array is -

Work + Allocation [P3]= { 6, 1, 2 } +{ 1, 0, 1 }={ 7, 1, 3 } Work:

		A		В		С
		6		1		2
P3	+		1		0	1
Work=		7		1	3	

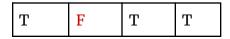
Finish Array:

Т	F	Т	Т

As Need[P1] = (3, 3, 2) > Work = > Process P1 is not yet selected.

Work Array remains same.

Finish Array:



Since we couldn't find a safe sequence, therefore the system is not in a safe state.