Please proof the applicability of Johnson Algorithm to the special case for 3 operations

■Applied Condition:
  max{M2 process time}≦min{M1 and M3 process time}
■ Applied Method:
  Transfer to the 2 pseudo composed facilities,
  and apply to Johnson Algorithm

	M1	M2	M3
Pro A	a1	a2	a3
Pro B	b1	b2	b3

	M1+M2	M2+M3
Pro A	a1+a2	a2+a3
Pro B	b1+b2	b2+b3

Step1: First, transform the problem into a two-machine case using the following:

- Pseudo-machine F1 = M1 + M2

- Pseudo-machine F2 = M2 + M3

This reduces the original 3-machine problem to a 2-machine flow shop problem with jobs processed in order: F1 → F2.

Step2:

If max{M2 process times}≤min{M1 and M3 process times}

then its contribution in both F1 and F2 won't dominate scheduling decisions

Job	M1	M2	M3
A	4	2	6
B	7	1	5

Job	F1 = M1+M2	F2 = M2+M3
A	6	8
B	8	6

Apply Johnson's Rule, process jobs as follows:

1. Find the minimum among all F1 and F2

2. Final order: A → B