

CS314 Operating System

Spring 2024

Exercise Questions on February 13th

EXERCISE #1

Is the following request safe? If yes, explain why. If not, explain why not.

Note: the correct “yes” or “no”, but based on a wrong explanation will not earn much credit for this question.

- (a) If Process B requests 4 more instances of the resource.
- (b) If Process C requests 2 more instance of the resource after (a).

Process	Assigned	MAX. Need	Requests Pending	Process Status
A	4	14	0	RUNNING
B	2	7	0	RUNNING
C	2	5	0	RUNNING

Available

6

EXERCISE #2

Assume the following situation, if Process C requests one more additional resource, and if we approve the request, is it in the safe state?

Processes	Assigned	Max. Needs
A	10	15
B	4	6
C	9	11

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Available