

Exercises

Concurrency and Distributed Systems
January 2023

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Vending machines

Given the three vending machines that you defined in a previous exercise, which of the following checks will pass?

- VM1 [T= VM2
- VM2 [T= VM1
- VM1 [F= VM2
- VM2 [F= VM1
- VM3 [F= VM2
- VM2 [F= VM3

Lifts

Write a simple (or simplistic) safety specification and refinement check to confirm that `LiftController(max)` will never allow more than `max` consecutive up events.

Write a liveness specification and refinement check to confirm that `LiftController(max)` is always ready to engage in at least one of the events up or down.