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Project 2: Process Synchronization

My solution to the museumsim project is fair because each tour guide only calls up() a maximum of 10 times on a semaphore that frees visitors to tour the museum. My solution is deadlock free when run with 2 tour guides or less. It is deadlock free under these conditions because no process is ever holding a resource while indefinitely waiting for another to be freed. I did not have time to finish designing my program to be able to support more than 2 guides giving tours. Lastly, my program is starvation free because no process has to wait a long time for it to be able to run. The only time a real wait occurs in a process for this program is on a programmed delay or when a visitor sleeps for two seconds to simulate the tour.