Message Passing

Homework #5, CSCI 322, Winter 2015
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Description:

This is based on Exercise 7.9 from the text. Implement your solutions in **Racket** using only channels for synchronization. You may choose to use either synchronous or asynchronous channels.

Two kinds of processes, `A`'s and `B`'s, enter a room. An `A` process cannot leave until it meets two `B` processes, and a `B` process cannot leave until it meets one `A` process. Each kind of process leaves the room—without meeting any other processes—once it has met the required number of other processes.

(a) Develop a server process to implement this synchronization. Show the interface of `A` and `B` processes to the server.

(b) Modify your answer to (a) so that the first of the two `B` processes that meets an `A` process does not leave the room until after the `A` process meets a second `B` process.

Turn in:

(a) A single racket file demonstrating your solution to (a)

(b) A single racket file demonstrating your solution to (b)

(c) A writeup, explaining your strategy for both solutions.

Due date:

Wednesday, March 11, midnight.