

# CS-511: Quiz 5

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We pledge our honor that we have abided by the Stevens Honor System.

## Exercise 1

In the release method of the monitor, the **nonZero** condition is only signalled once. If multiple threads were waiting, only one would have been awoken. To fix this, we can either **signalAll** or cascaded signalling must be utilized.

## Exercise 2

First, thread **P** is ran, we print "A" and start the **release** method. We run the empty check on the condition, but before we increment permissions, we switch to thread **Q** where we acquire. Since, we have not incremented permissions, it is still equal to zero, and we wait. Now, we switch back to **P**, where the thread will finish it's function block and increment permissions. Since we are never signalled at the end of **P**, thread **Q** is stuck in the wait condition and "B" is never printed.