

Quiz

- What if we reverse the order of the first two lines the 2-process Peterson's algorithm

P0:

```
turn = 1;
```

```
flag[0] = true;
```

P1:

```
turn = 0;
```

```
flag[1] = true;
```

...

Would it work?

- Prove that Peterson's N-process algorithm ensures:
 - ✓ mutual exclusion: no two processes are in the critical section at a time
 - ✓ starvation freedom: every process in the trying section eventually reaches the critical section (assuming no process fails in the trying, critical, or exit sections)
- Show that the lock-based producer-consumer is correct