## Producer-Consumer Problem With Bounded-Buffer

## Given:

```
semaphore items = 0;
semaphore spaces = BUFFER_SIZE;
```

## Can we?

```
if (items >= BUFFER_SIZE)
    producer.block();
```

if: the buffer is full

then: the producer blocks until a consumer removes an item

No! We can't check the current value of a semaphore, because

- ! the only operations are wait and signal.
- ? But...