Consider the case when multiple threads call insert() and remove() methods concurrently for a single BoundedBuffer instance with SIZE $\geq 1$.

1) Can you provide an example in which the wait set includes a thread waiting at line 2 in insert() and a thread waiting at line 11 in remove(), in slide 12? If not, why not?

2) How would the code behave if all wait/notify calls (lines 2, 6, 11, 15) were removed from the insert() and remove() methods in slide 12?