

Worksheet: Execution of concurrent implementation of FIFO queue q

Is this a linearizable execution?

Time	Task A	Task B
0	Invoke $q.enq(x)$	
1	Work on $q.enq(x)$	Invoke $q.enq(y)$
2	Work on $q.enq(x)$	Return from $q.enq(y)$
3	Return from $q.enq(x)$	
4		Invoke $q.deq()$
5		Return x from $q.deq()$

Yes! Can be linearized as “ $q.enq(x) ; q.enq(y) ; q.deq():x$ ”

