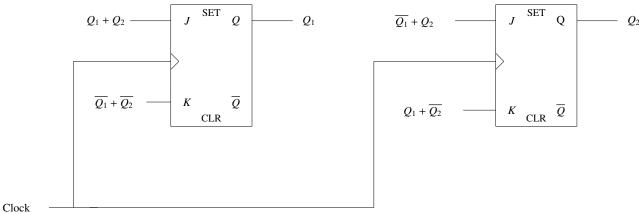
## Gate IN2018, 44

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A 2-bit synchronous counter using two J-K flip flops is shown. The expression for the inputs to the J-K flip flops are also shown in the figure. The output sequence of the counter starting from  $Q_1Q_2 = 00$  is



A. 
$$00 \rightarrow 11 \rightarrow 10 \rightarrow 01 \rightarrow 00 \dots$$

B. 
$$00 \to 01 \to 10 \to 11 \to 00...$$

C. 
$$00 \rightarrow 01 \rightarrow 11 \rightarrow 10 \rightarrow 00 \dots$$

D. 
$$00 \rightarrow 10 \rightarrow 11 \rightarrow 01 \rightarrow 00 \dots$$