1. Design a sequence detector to detect the sequence 0011 using JK flip flop.
2. A sequential circuit has three flip-flops A, B, C; one input x; and one output, y. The state diagram is shown in following figure. The circuit is to be designed by treating the unused states as don’t-care conditions. Analyse the circuit obtained from the design to determine the effect of the unused states.



1. Use J-K flip-flop in the design