Hw3 - Niki Nezakati

Q3 sequence = "1011001001111001"

First Clk : i=0, reset=1 => mystate = A, num = 0
count = 0

Second clk : i=0, count=0, reset=0 => mystate = A => mystate = B
i=1, count=0

and so on:

mystate = B => sequence(1) = '0' => mystate = C, i=2, count=0

mystate = C => mystate = E, i=3, count=0

mystate = E => Sequence(3) = '1' => mystate = D, count = 1, i=4

mystate = D => mystate = F, i=5, count=1

mystate = F => mystate = A, i=6, count=1

mystate = A => mystate = B, i=7, count=1

mystate = B => sequence(7) = '0' => mystate = C, i=8, count=1

mystate = C => mystate = E, i=9, count=1

mystate = E => sequence(9) = '1' => mystate = D, count = 2, i=10

mystate = D => mystate = F, i=11, count = 2

mystate = F => mystate = A, i=12, count = 2

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mystate = A ⇒ mystate = B, i = 13, count = 2

mystate = B ⇒ sequence(13) = '1' ⇒ mystate = D, i = 14, count = 2

mystate = D ⇒ mystate = F, i = 15, count = 2

mystate = F ⇒ mystate = A, i = 16, count = 2

mystate = A ⇒ mystate = B, i = 17, count = 2

mystate = B ⇒ sequence(17)

⇒ Error, index out of range

count = 2 ⇒ num = 2