```
.wrap_target                          Lable 0
bitloop:                              Lable 1
out x, 1 side 0 [T3 - 1]              L 1
jmp !x do_zero side 1 [T1 - 1]        L 2
do_one:                               Lable 2
jmp bitloop side 1 [T2 - 1]           L 3
do_zero:                              Lable 3
nop side 0 [T2 - 1]                   L 4
.wrap
```

***

$T_1 = 2$

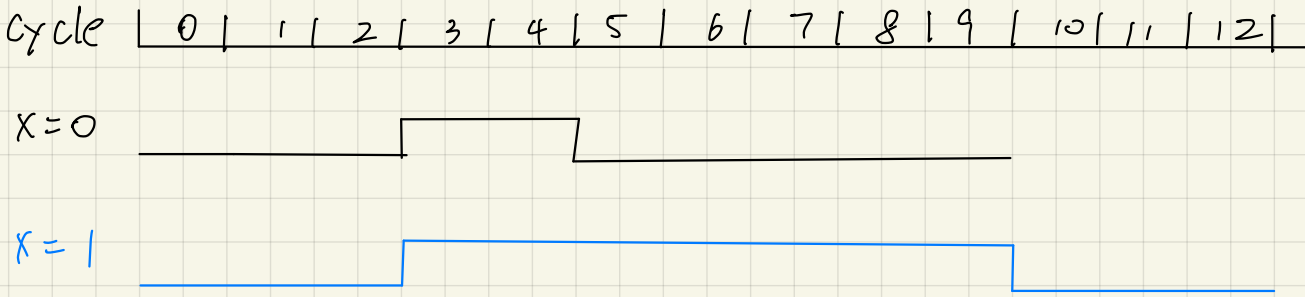
$T_2 = 5$

$T_3 = 3$

Assume x = 0

Assume x = 1

GPIO:



cycle	0	1	2	3	4	5	6	7
CLK	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0
Current instruction	L1	L2	L4/L3	L1	Repeat cycle 1 → 3			
Data in FIFO?	N	Y	NY	N	Repeat Cycle 1 → 3			
SM stalled?	Y	N	YN	Y	Repeat cycle 1 → 3			
Delay Cycle	3	2	55	3	Repeat Cycle 1 → 3			
OSR	X → 0	0	0	x → 0	Repeat Cycle 1 → 3			
X	0	0	0	0	Repeat Cycle 1 → 3			
LED pin (GP10)	0	1	0	0	Repeat Cycle 1 → 3			