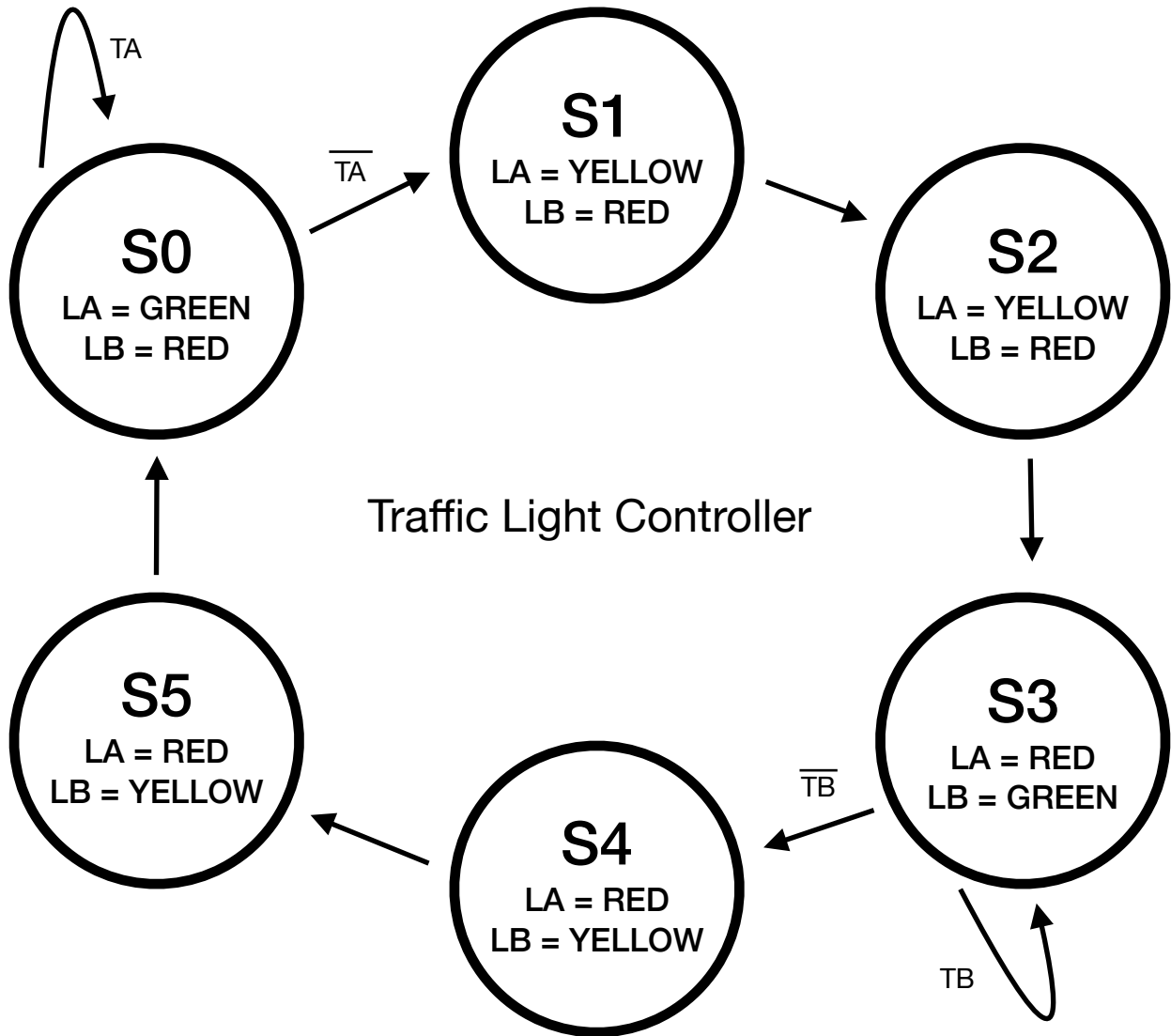


QUESTION 2



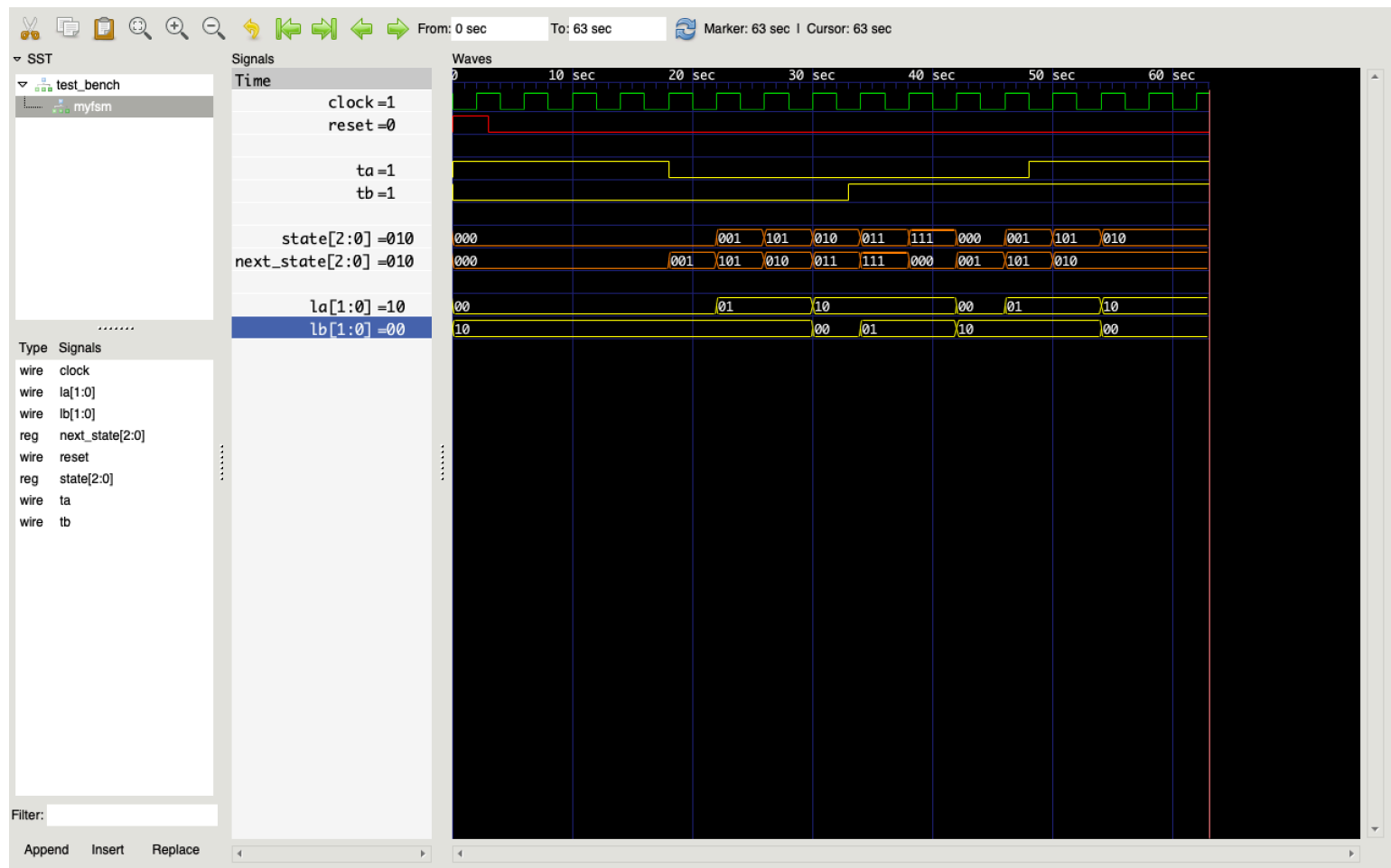
STATE ENCODING	S2 S1 S0
S0	0 0 0
S1	0 0 1
S2	1 0 1
S3	0 1 0
S4	0 1 1
S5	1 1 1

Using this encoding, The output logic remain same as the normal TCL . As output is govern by only last two bit

COLOR ENCODING
GREEN : 00
YELLOW : 01
RED : 10

OUTPUT LOGIC
LA[0] : S1
LA[1] : $\sim S1$ & S0
LB[0] : $\sim S1$
LB[1] : S1 & S0

GTK WAVEFORMS



```
0  la=00  lb=10
22 la=01  lb=10
30 la=10  lb=00
34 la=10  lb=01
42 la=00  lb=10
46 la=01  lb=10
54 la=10  lb=00
```

OUTPUT