State 1 (top-left):
```
R1=1, Y1=0, G1=0
R2=1, Y2=0, G2=0
R3=0, Y3=0, G3=1
R4=1, Y4=0, G4=0
t=t+1
```
Self-loop: t % 60 != 0

State 2 (top-right):
```
R1=1, Y1=0, G1=0
R2=1, Y2=0, G2=0
R3=0, Y3=1, G3=0
R4=1, Y4=0, G4=0
t=t+1
```
Self-loop: t % 65 != 0

Transition State 1 → State 2: t % 60 == 0

State 3 (right):
```
R1=1, Y1=0, G1=0
R2=1, Y2=0, G2=0
R3=1, Y3=0, G3=0
R4=0, Y4=0, G4=1
t=t+1
```
Self-loop: t % 60 != 0

Transition State 2 → State 3: t % 65 == 0

State 4 (lower-right):
```
R1=1, Y1=0, G1=0
R2=1, Y2=0, G2=0
R3=1, Y3=0, G3=0
R4=0, Y4=1, G4=0
t=t+1
```
Self-loop: t % 65 != 0

Transition State 3 → State 4: t % 60 == 0

State 5 (bottom-right):
```
R1=0, Y1=0, G1=1
R2=1, Y2=0, G2=0
R3=1, Y3=0, G3=0
R4=1, Y4=0, G4=0
t=t+1
```
Self-loop: t % 60 != 0

Transition State 4 → State 5: t % 65 == 0

State 6 (bottom-left):
```
R1=0, Y1=1, G1=0
R2=1, Y2=0, G2=0
R3=1, Y3=0, G3=0
R4=1, Y4=0, G4=0
t=t+1
```
Self-loop: t % 65 != 0

Transition State 5 → State 6: t % 60 == 0

State 7 (left):
```
R1=1, Y1=0, G1=0
R2=0, Y2=0, G2=1
R3=1, Y3=0, G3=0
R4=1, Y4=0, G4=0
t=t+1
```
Self-loop: t % 60 != 0

Transition State 6 → State 7: t % 65 == 0

State 8 (upper-left):
```
R1=1, Y1=0, G1=0
R2=0, Y2=1, G2=0
R3=1, Y3=0, G3=0
R4=1, Y4=0, G4=0
t=t+1
```
Self-loop: t % 65 != 0

Transition State 7 → State 8: t % 60 == 0

Transition State 8 → State 1: t % 65 == 0

The existence of some state means
it has one token and absence means zero token
due to space limitations

you should write all the states as written in the slides tho.
Dr. Basem told me not writing all the states would be penalized
as I created my own notation but I wrote the note above
in the exam so maybe that's why he accepted the answer