

Semáforos

Con llaves lógicas (Logic Switchs)



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LS

LR

Ahora



Consideraciones

- Por simplicidad se consideran 2 estados relevantes de un semáforo
- Modelamos el semáforo como un Logic Switch
 - Logic **Set** = Verde
 - Logic **Reset** = Rojo

Ciclo del semáforo

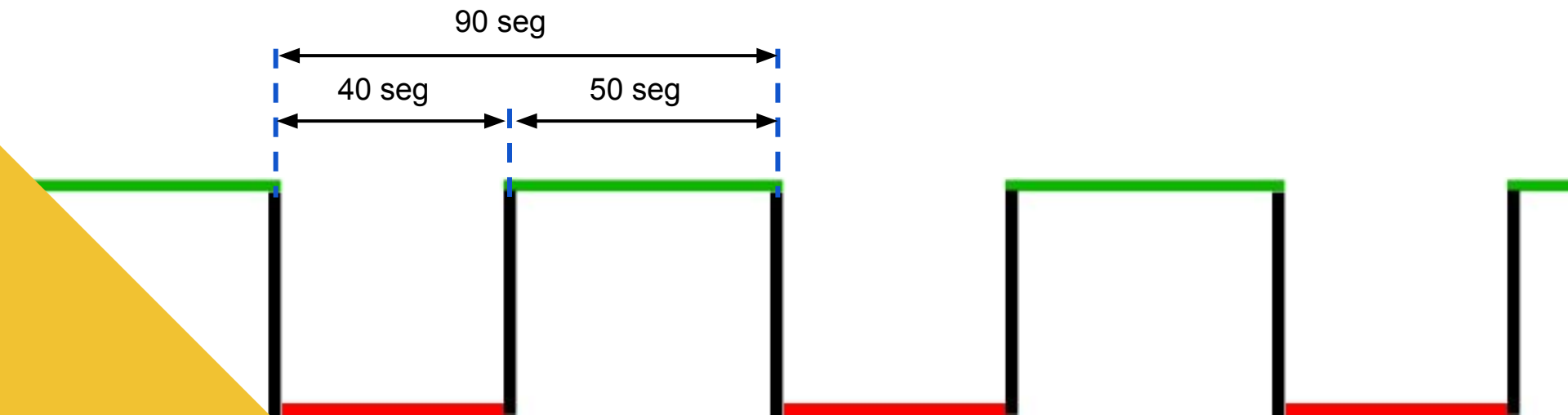
Ejemplo:

40 Segundos **ROJO** (T_r)

50 Segundos **VERDE** (T_v)

CICLO = 90 Segundos (T_c)

$$T_c = T_r + T_v$$

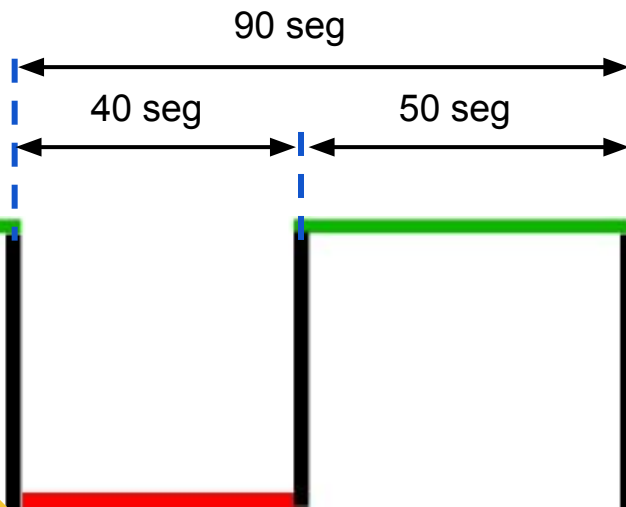


Ciclo del semáforo

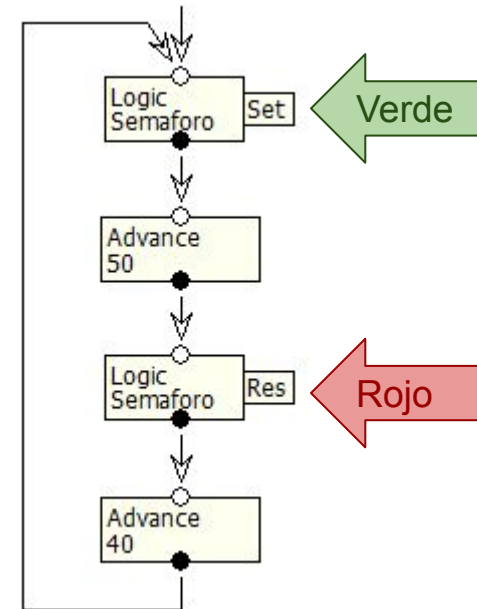
Ejemplo:

40 Segundos **ROJO** (T_r)
50 Segundos **VERDE** (T_v)

CICLO = 90 Segundos (T_c)
 $T_c = T_r + T_v$

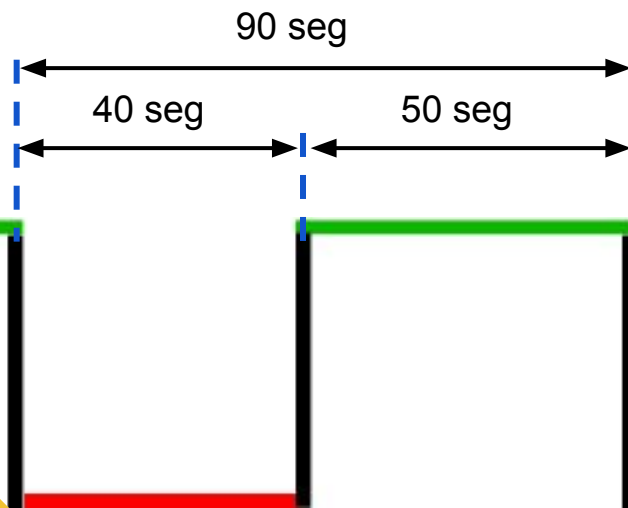
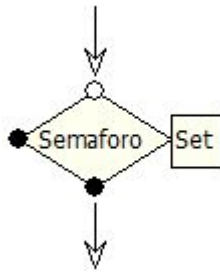


Controlador del semáforo

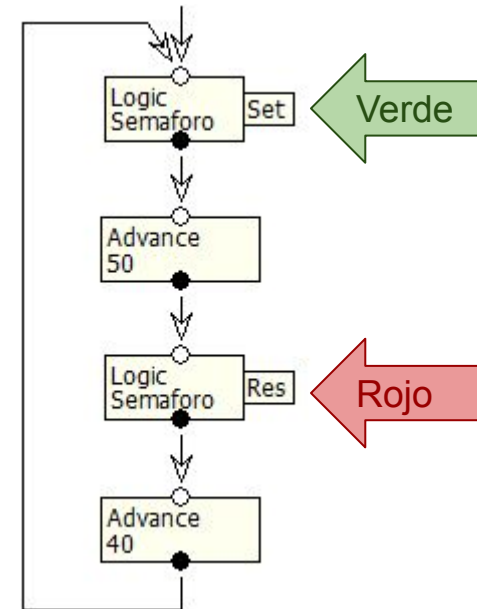


Ciclo del semáforo

Vehículos

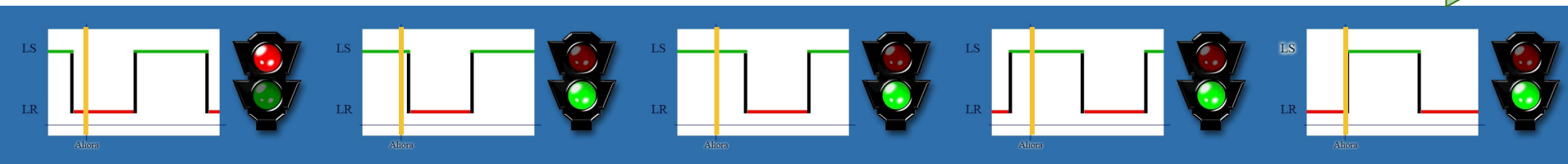


Controlador del semáforo



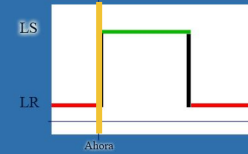
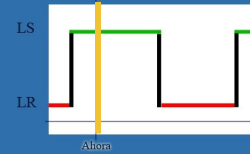
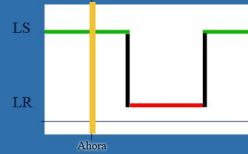
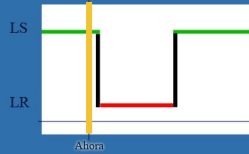
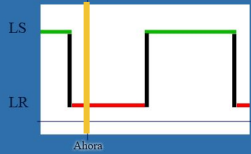
Semáforos sincronizados

Onda verde 10 Seg.



Semáforos sincronizados

Onda verde 10 Seg.



Semáforo 1

50 Seg. Verde
40 Seg. Rojo

0 Fase

Semáforo 2

50 Seg. Verde
40 Seg. Rojo

10 Fase

Semáforo 3

50 Seg. Verde
40 Seg. Rojo

20 Fase

Semáforo 4

50 Seg. Verde
40 Seg. Rojo

30 Fase

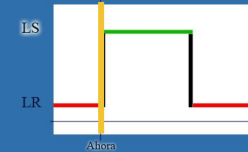
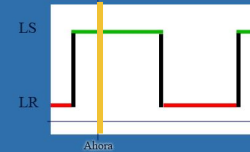
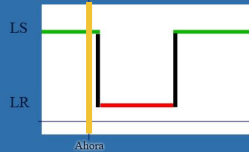
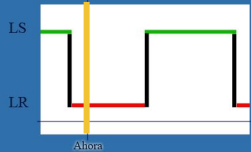
Semáforo 5

50 Seg. Verde
40 Seg. Rojo

40 Fase

Semáforos sincronizados

Onda verde 10 Seg.



Semáforo 1

50 Seg. Verde
40 Seg. Rojo

0 Fase

Semáforo 2

50 Seg. Verde
40 Seg. Rojo

10 Fase

Semáforo 3

50 Seg. Verde
40 Seg. Rojo

20 Fase

Semáforo 4

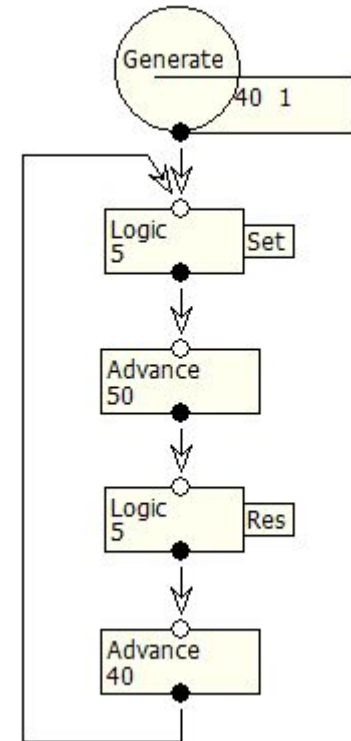
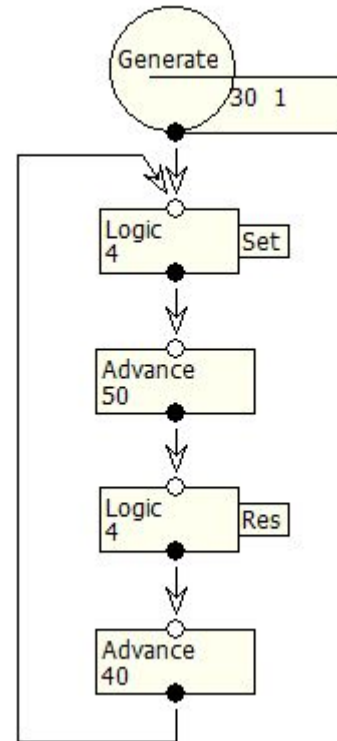
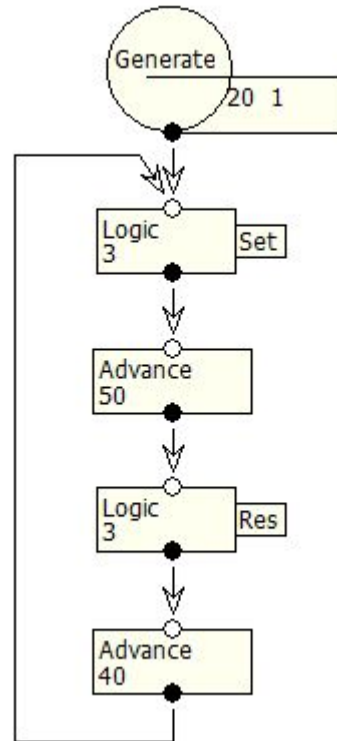
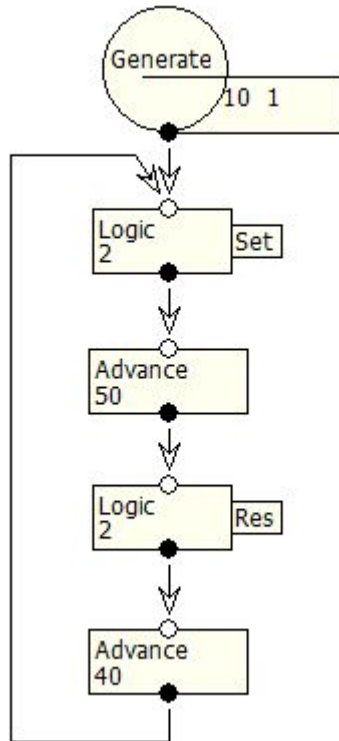
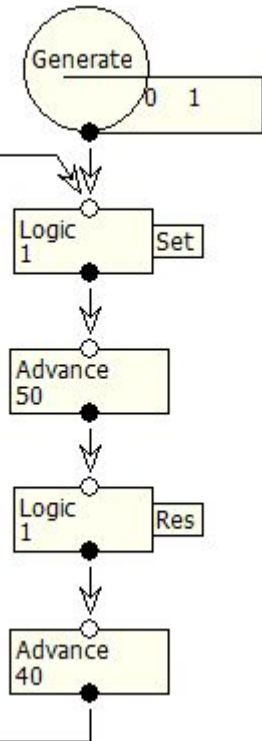
50 Seg. Verde
40 Seg. Rojo

30 Fase

Semáforo 5

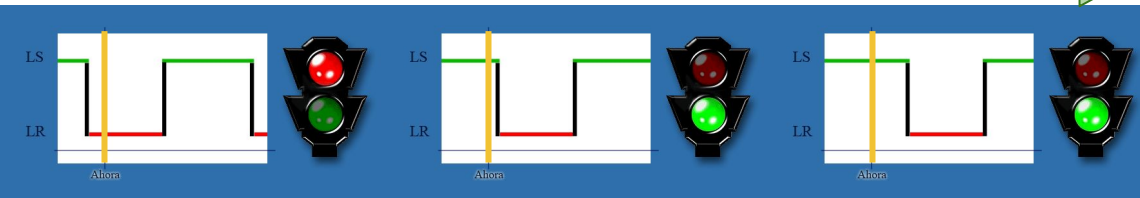
50 Seg. Verde
40 Seg. Rojo

40 Fase



Semáforos sincronizados

Onda verde 10 Seg.



Semáforo 1
50 Seg. Verde
40 Seg. Rojo

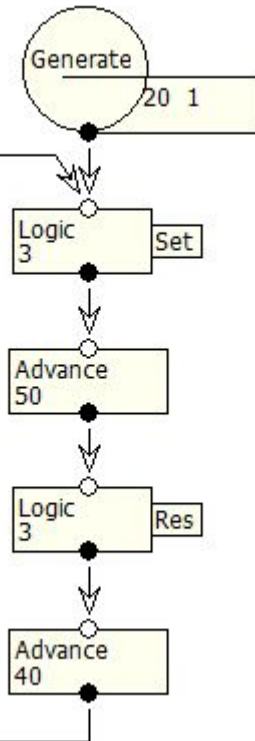
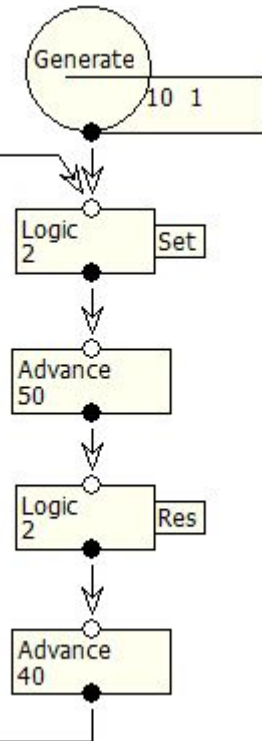
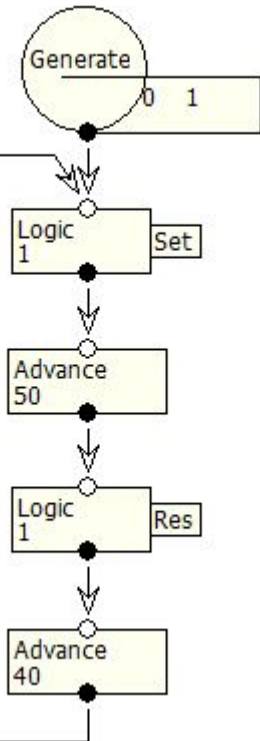
0 Fase

Semáforo 2
50 Seg. Verde
40 Seg. Rojo

10 Fase

Semáforo 3
50 Seg. Verde
40 Seg. Rojo

20 Fase



Tiempo
Onda Verde

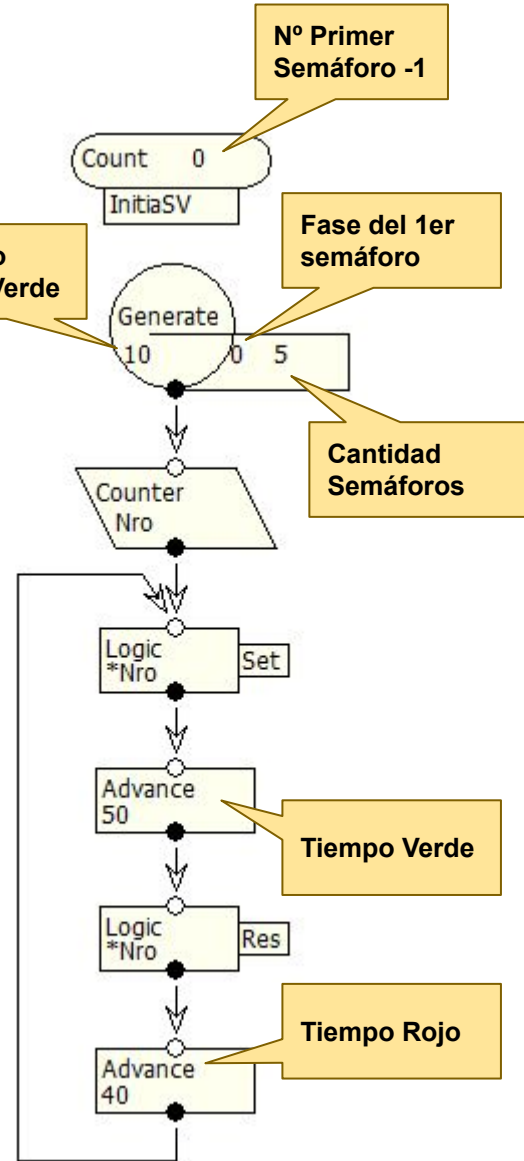
Nº Primer
Semáforo -1

Fase del 1er
semáforo

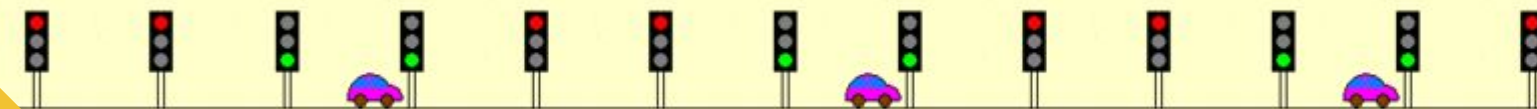
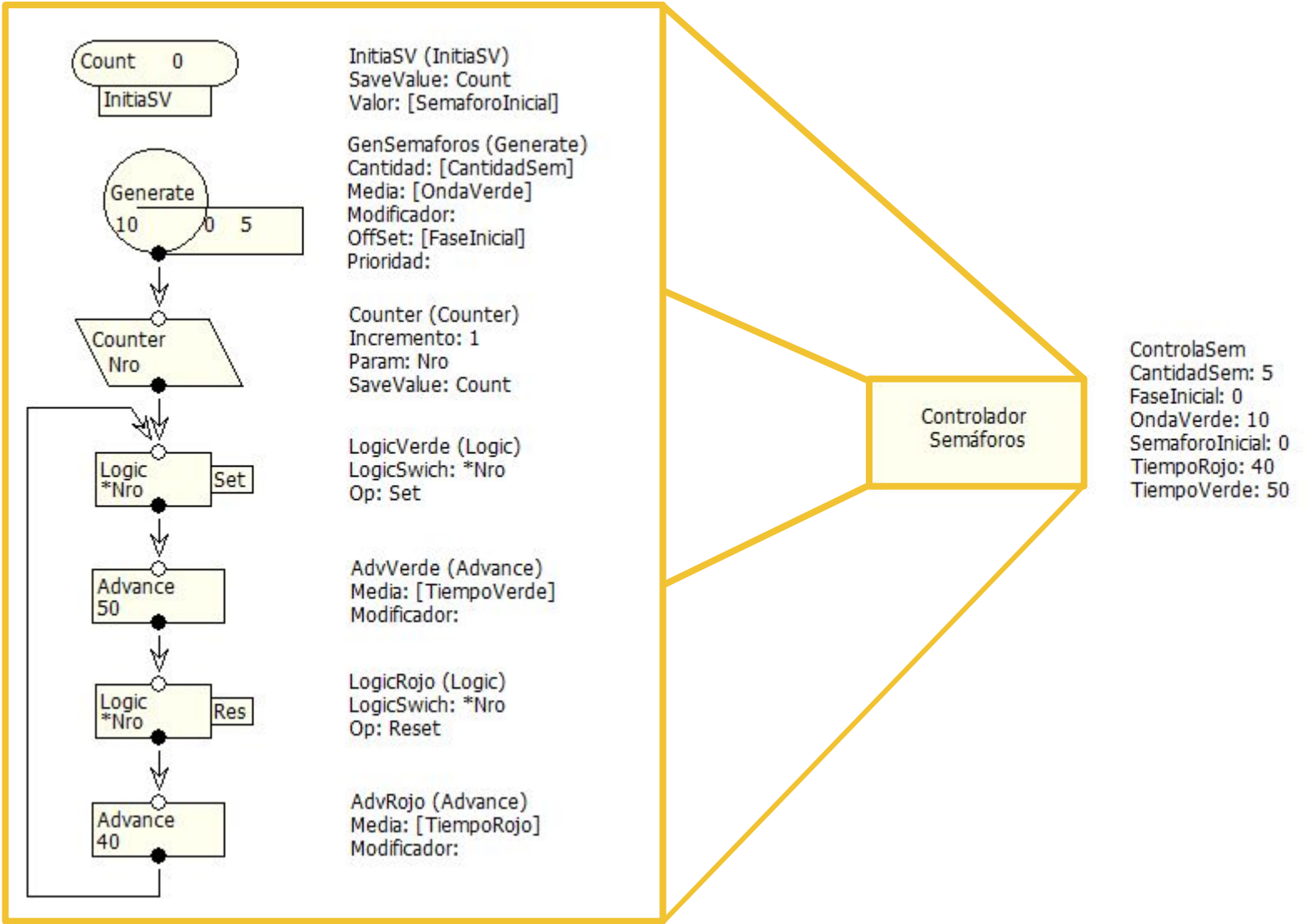
Cantidad
Semáforos

Tiempo Verde

Tiempo Rojo

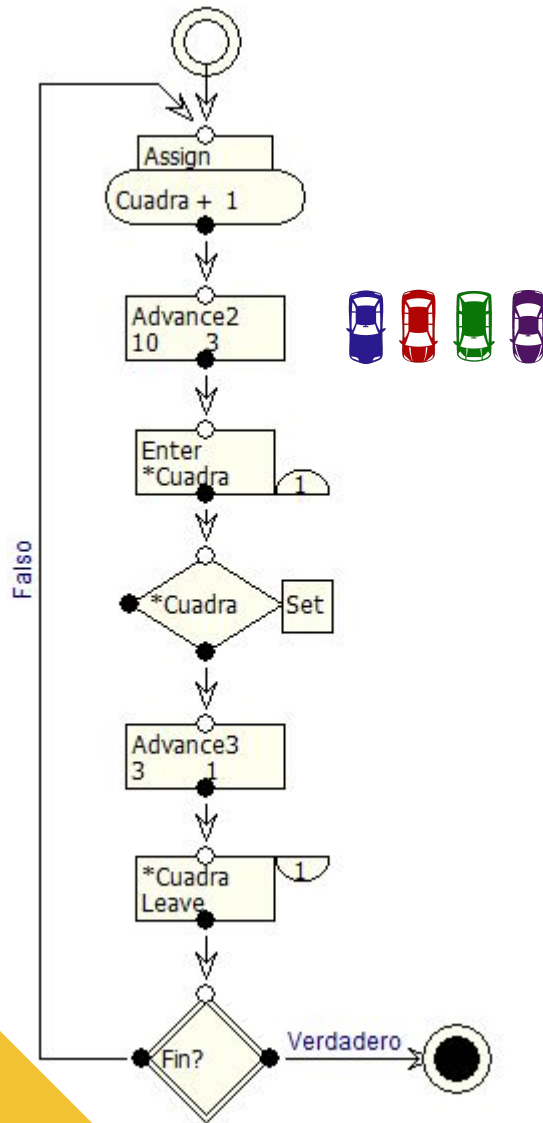


Módulo controlador

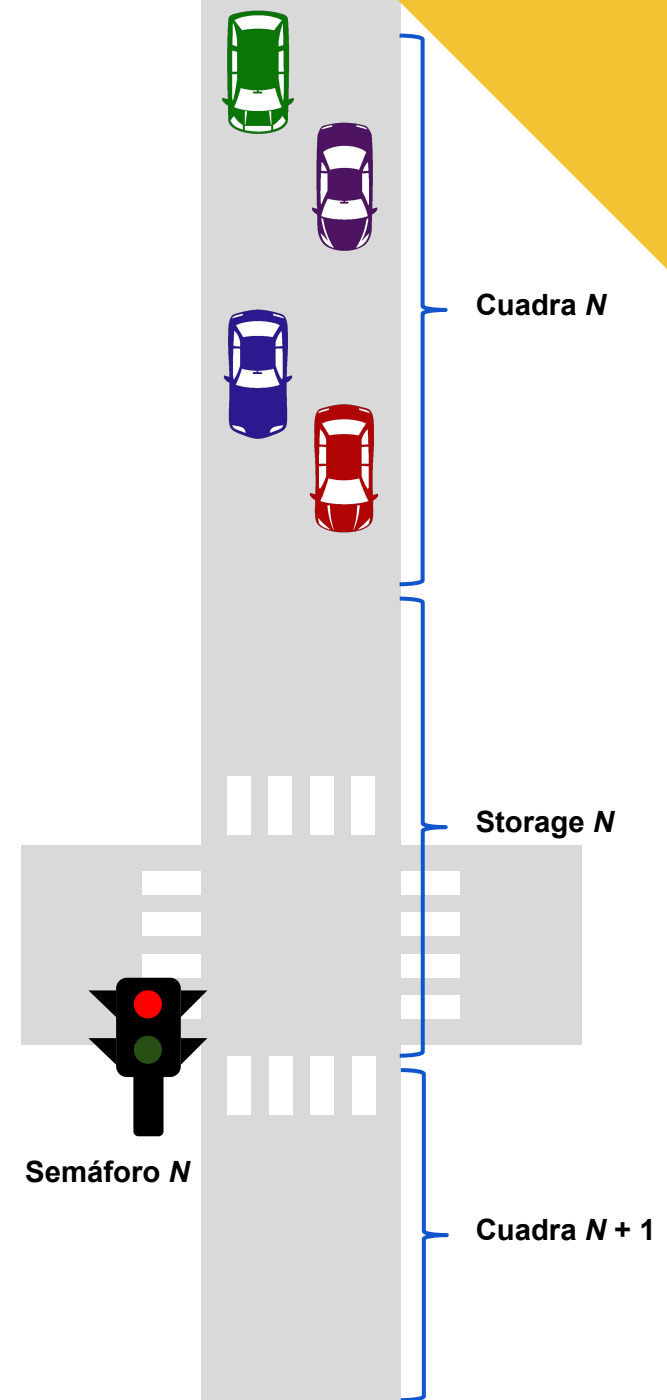
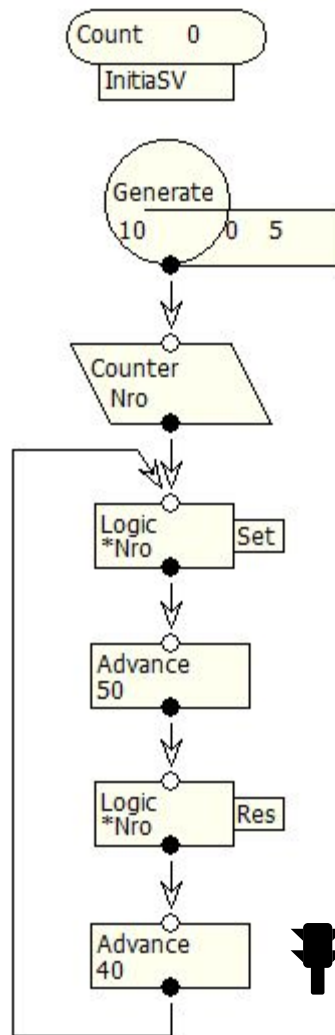


Vehículos circulando

Módulo recorrido de vehículos



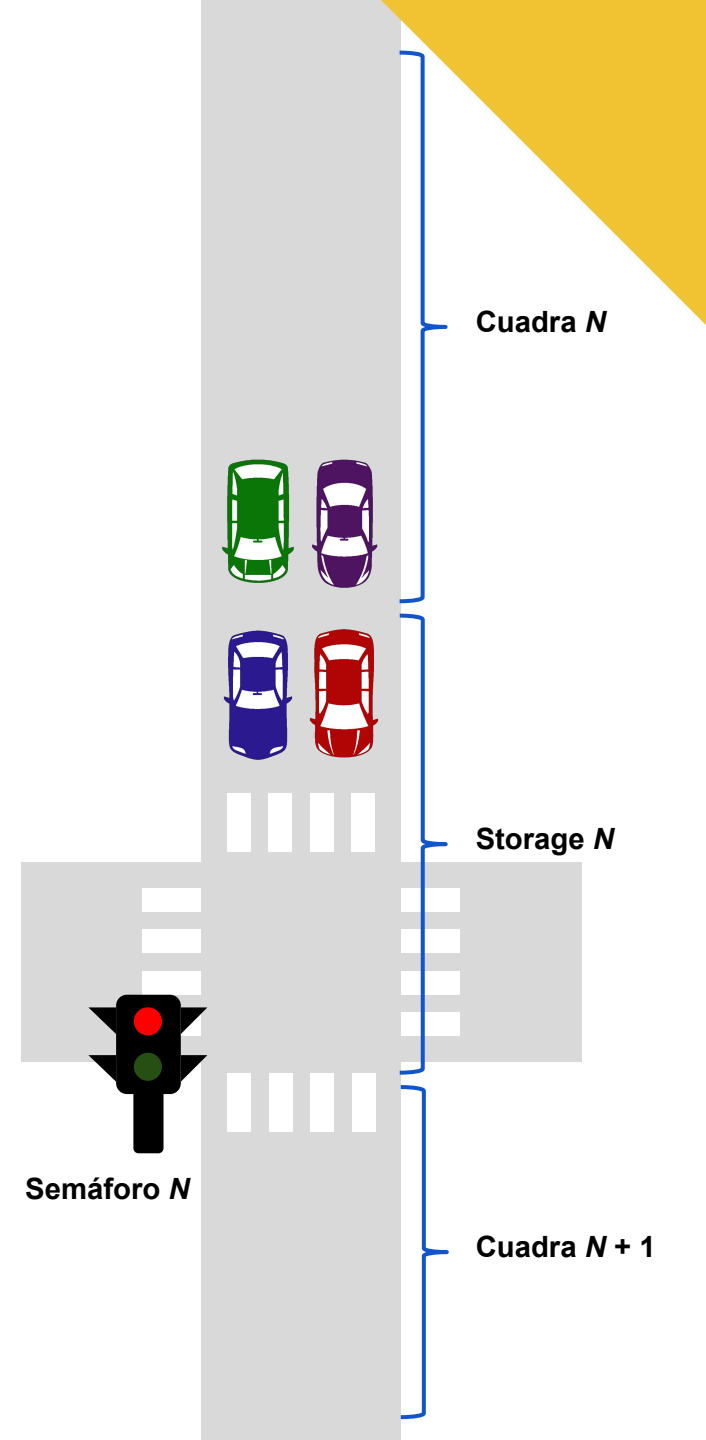
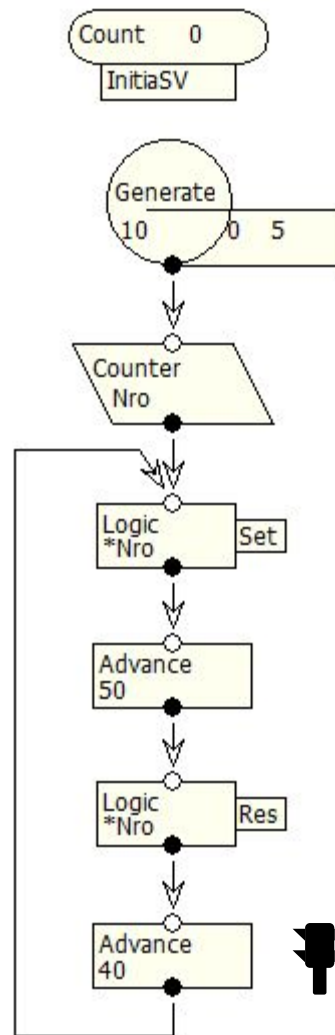
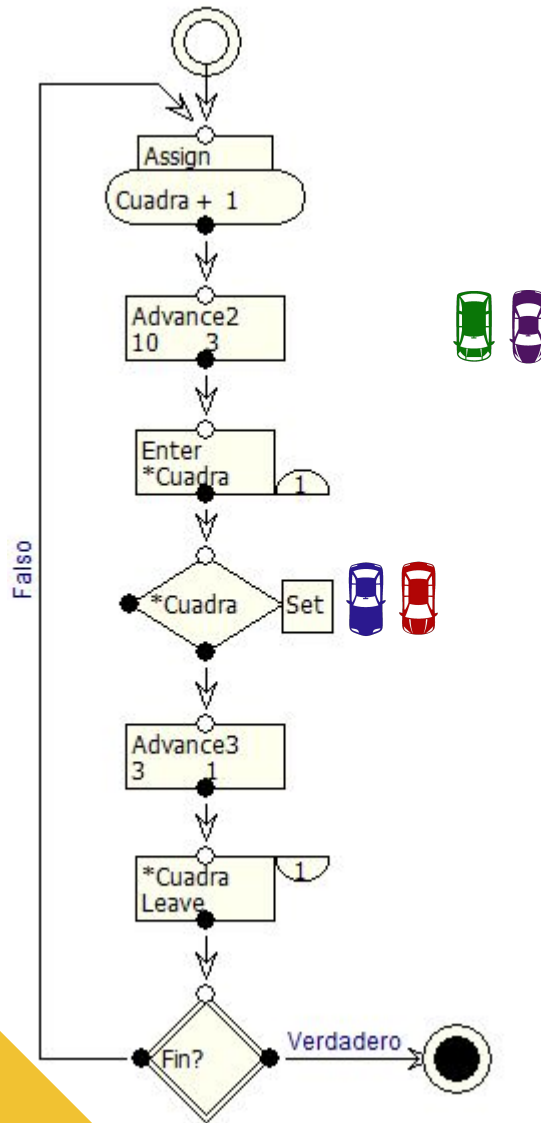
Controlador de Semáforos



Vehículos circulando

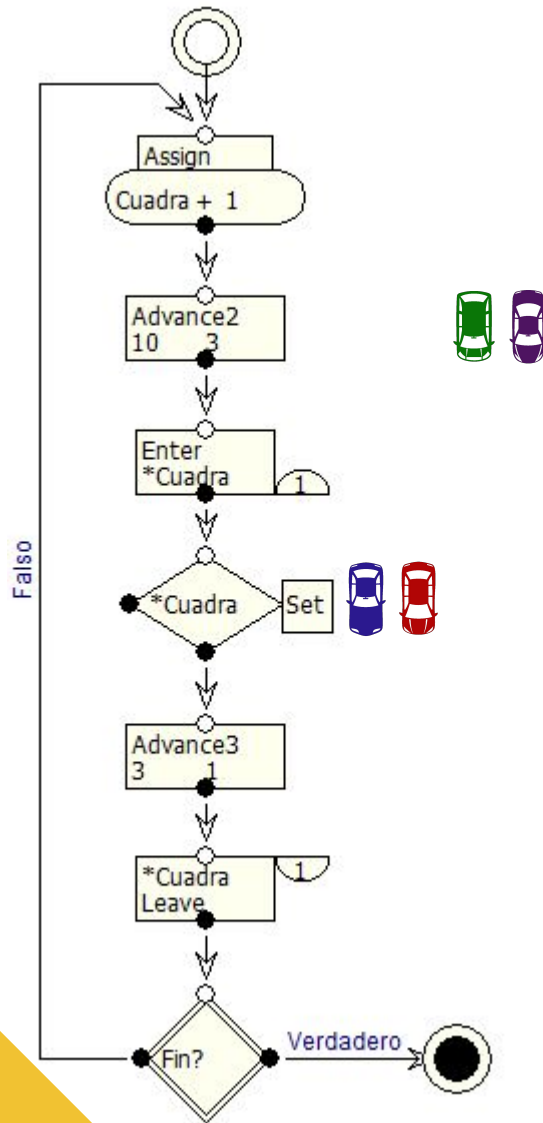
Módulo recorrido de vehículos

Controlador de Semáforos

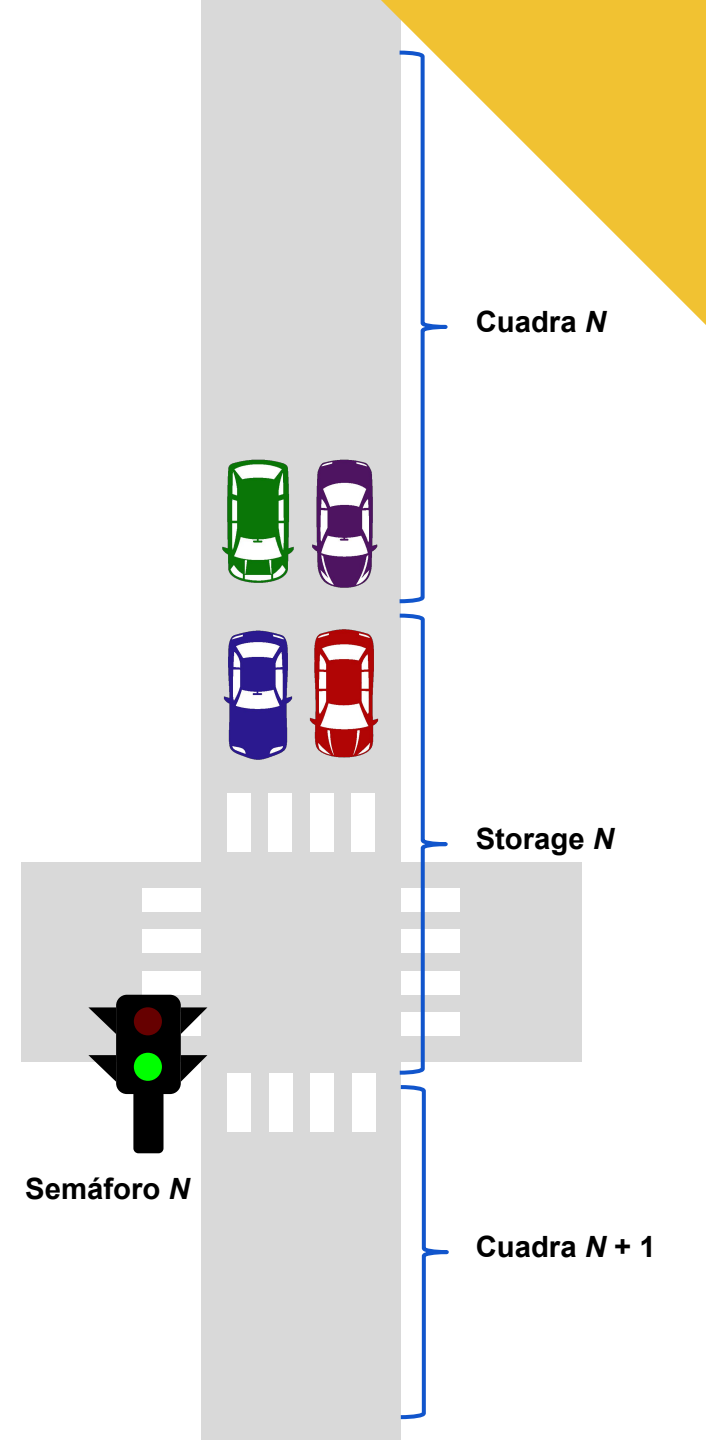
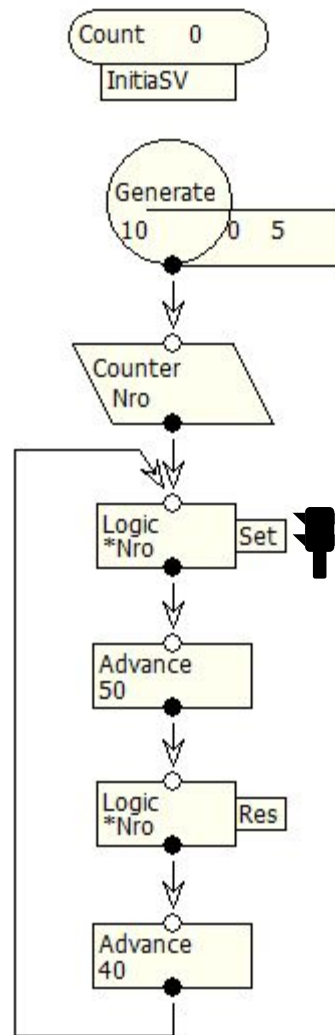


Vehículos circulando

Módulo recorrido de vehículos



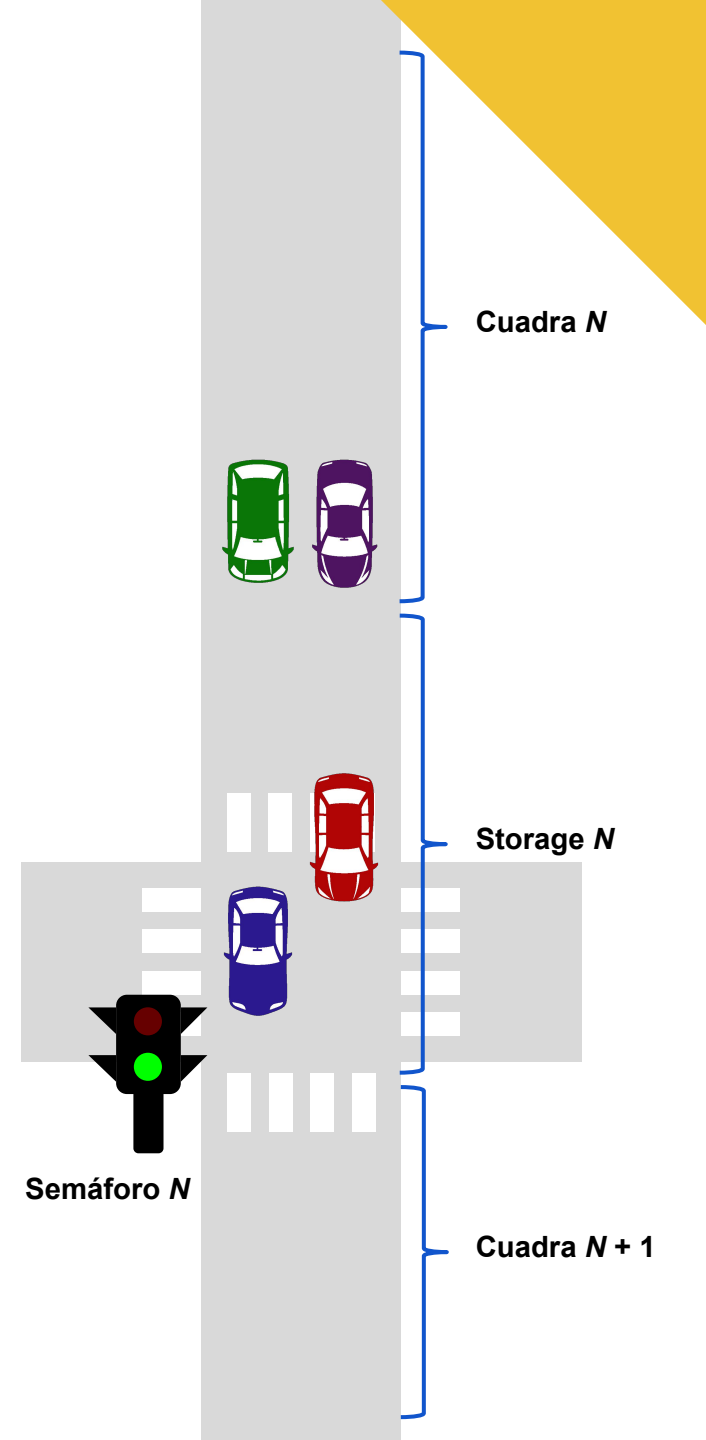
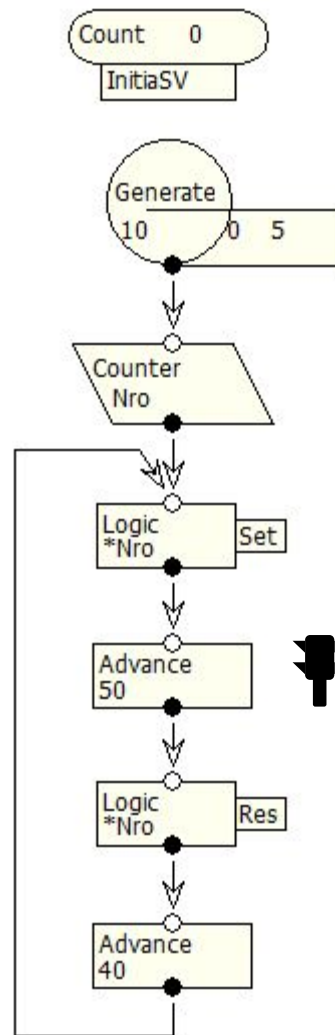
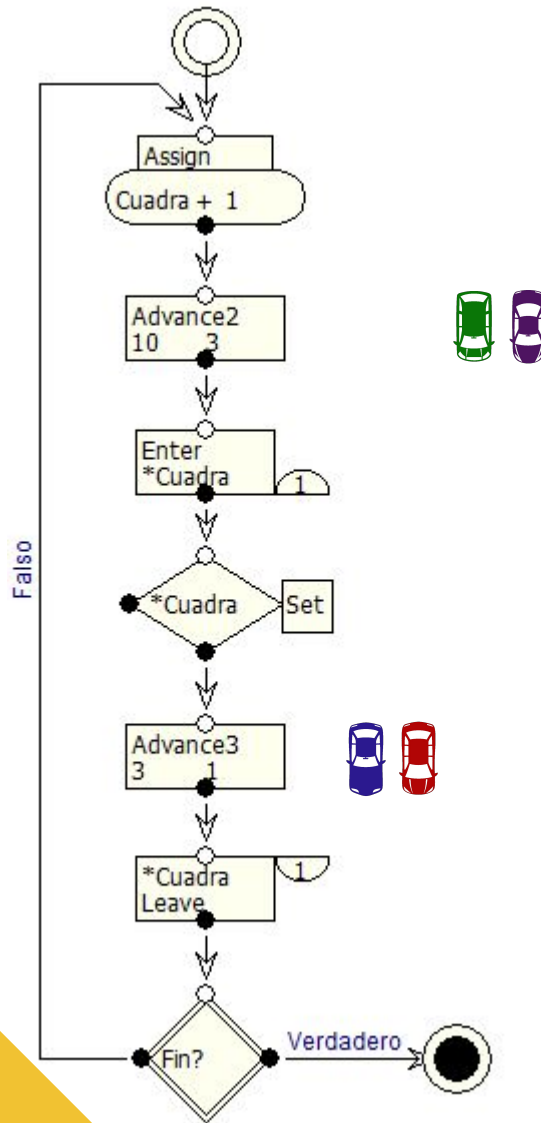
Controlador de Semáforos



Vehículos circulando

Módulo recorrido de vehículos

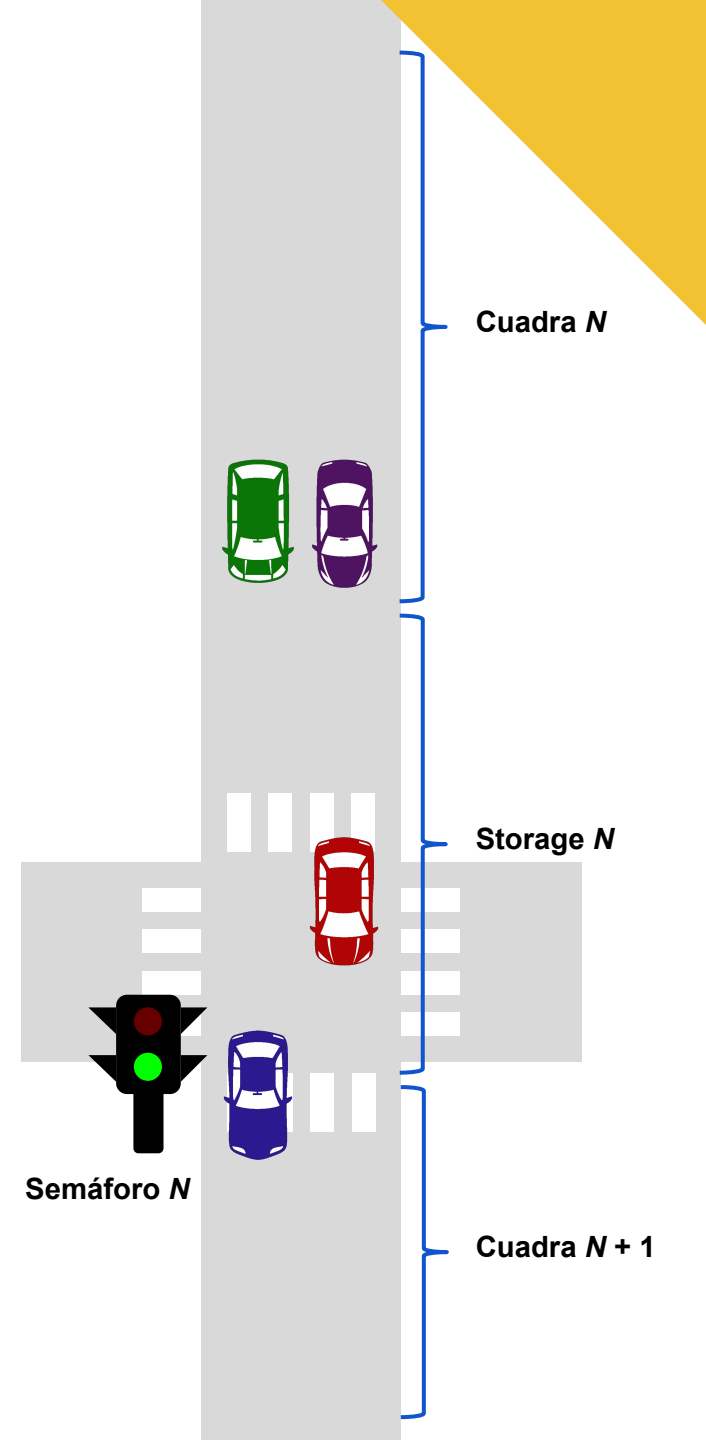
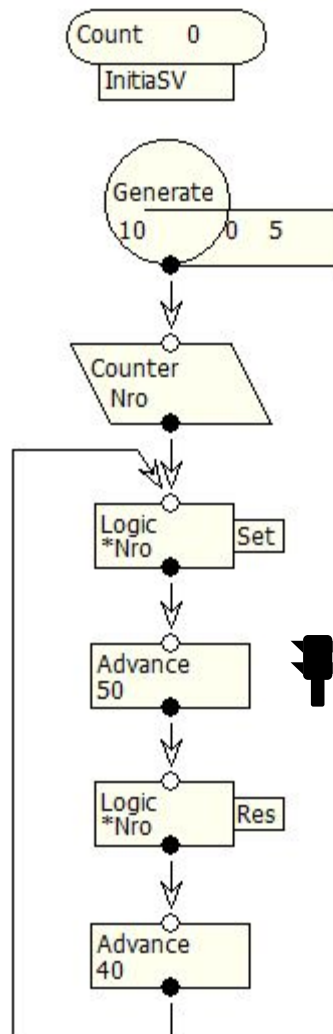
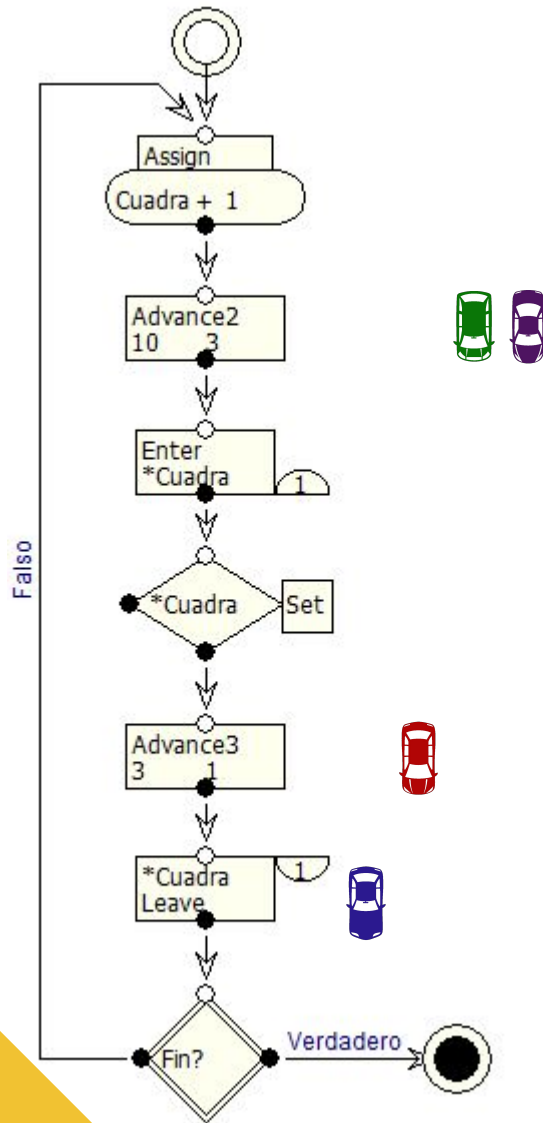
Controlador de Semáforos



Vehículos circulando

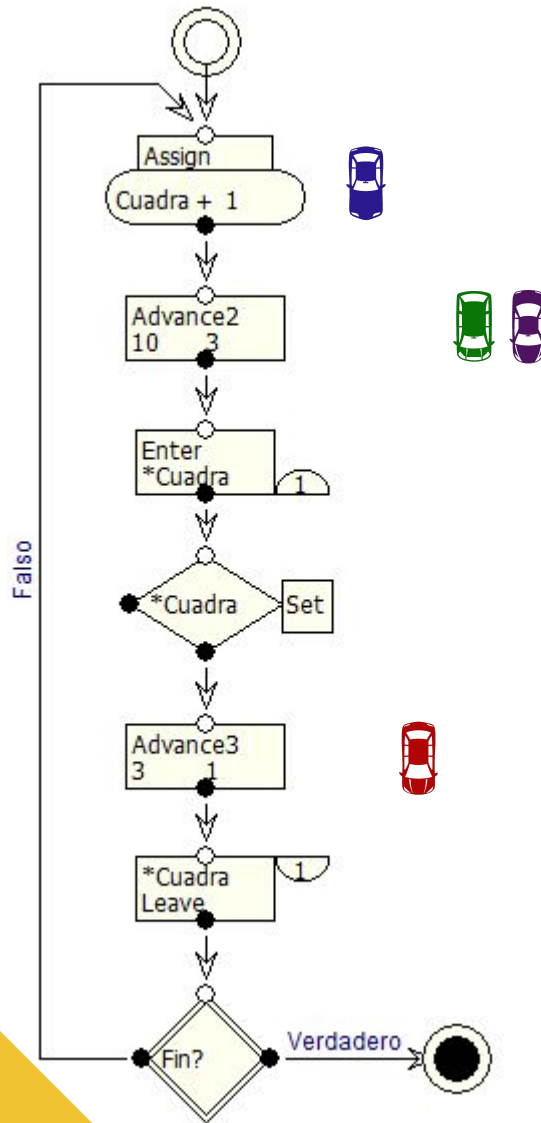
Módulo recorrido de vehículos

Controlador de Semáforos

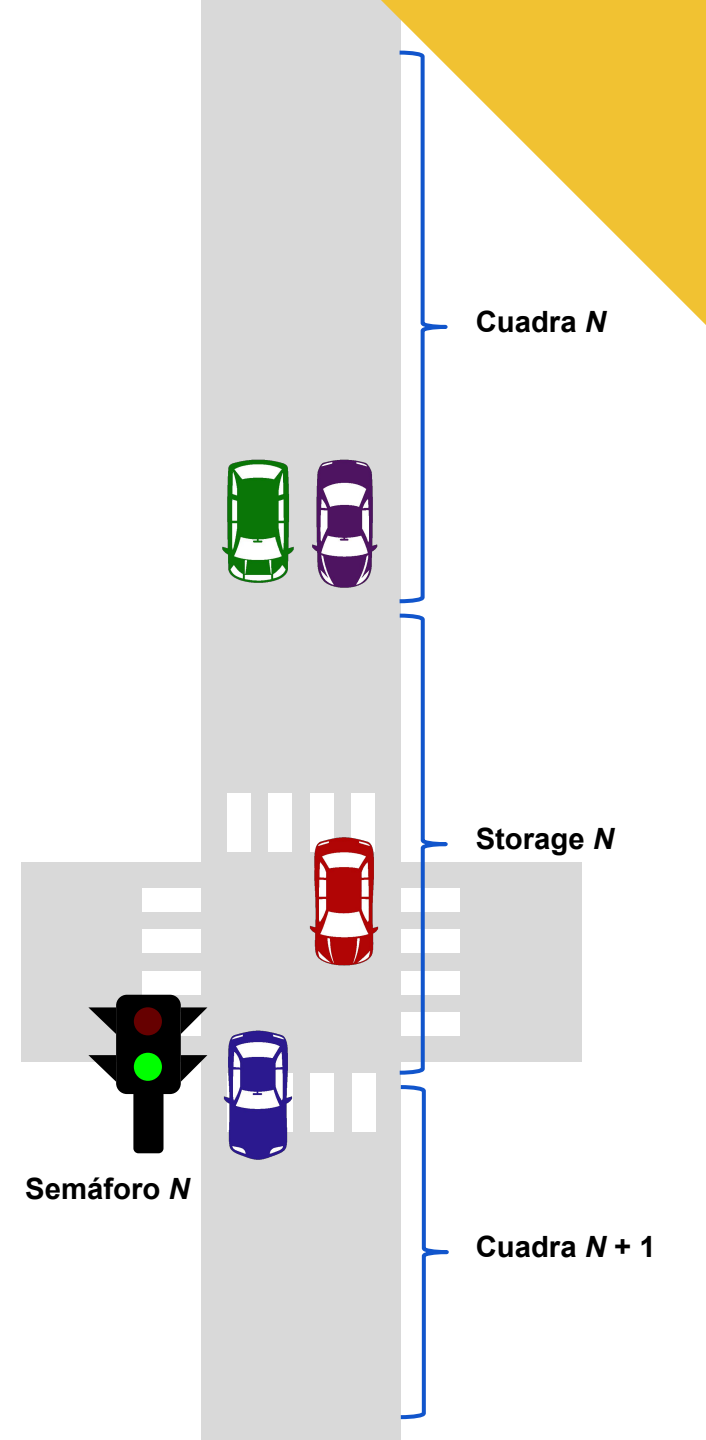
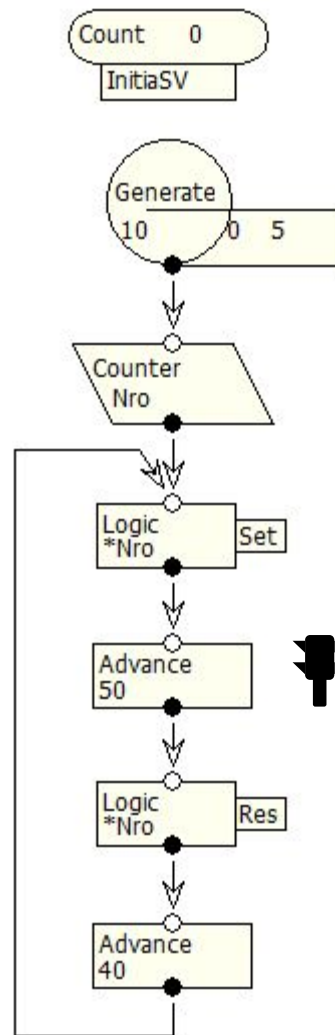


Vehículos circulando

Módulo recorrido de vehículos



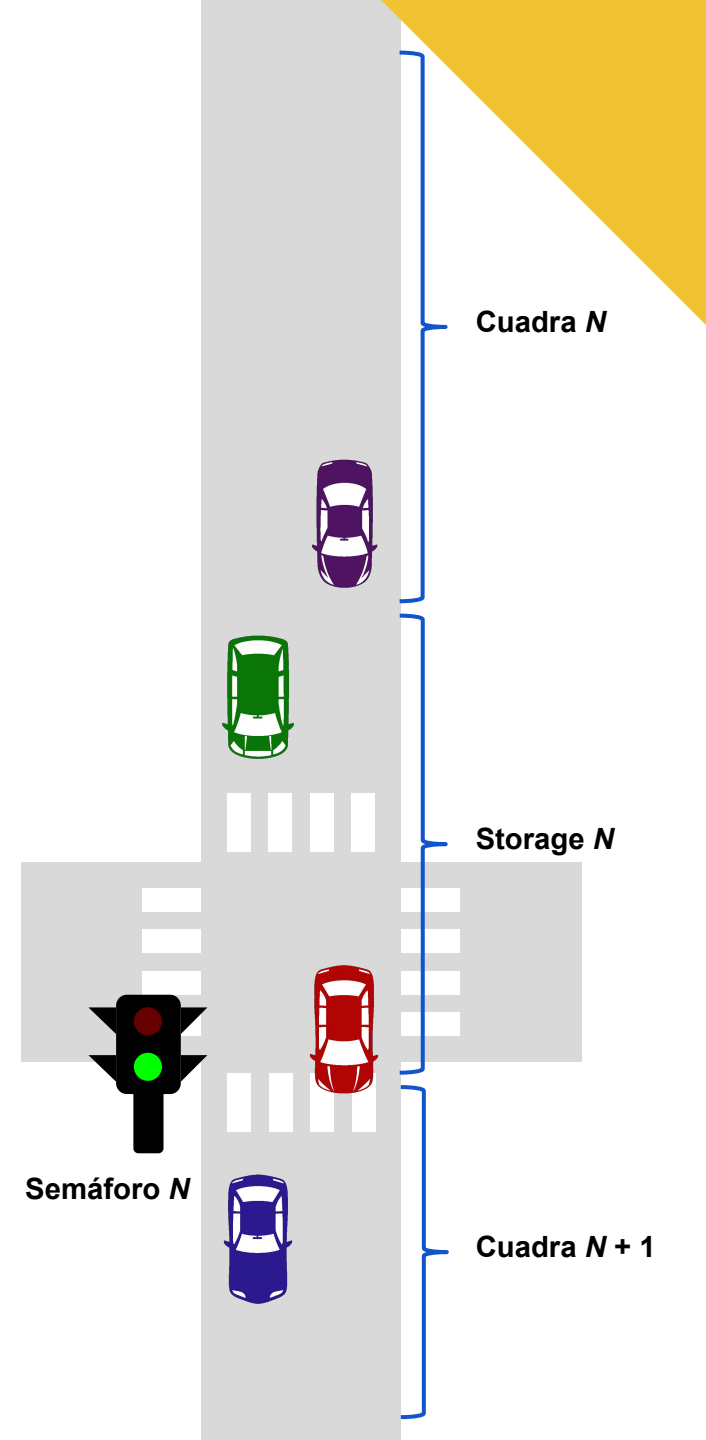
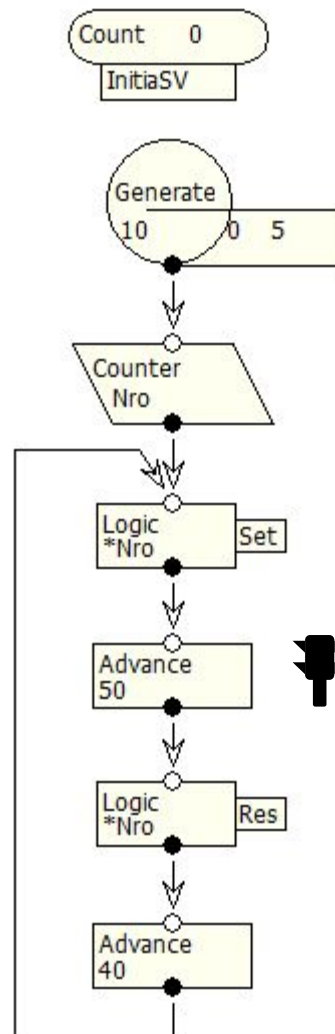
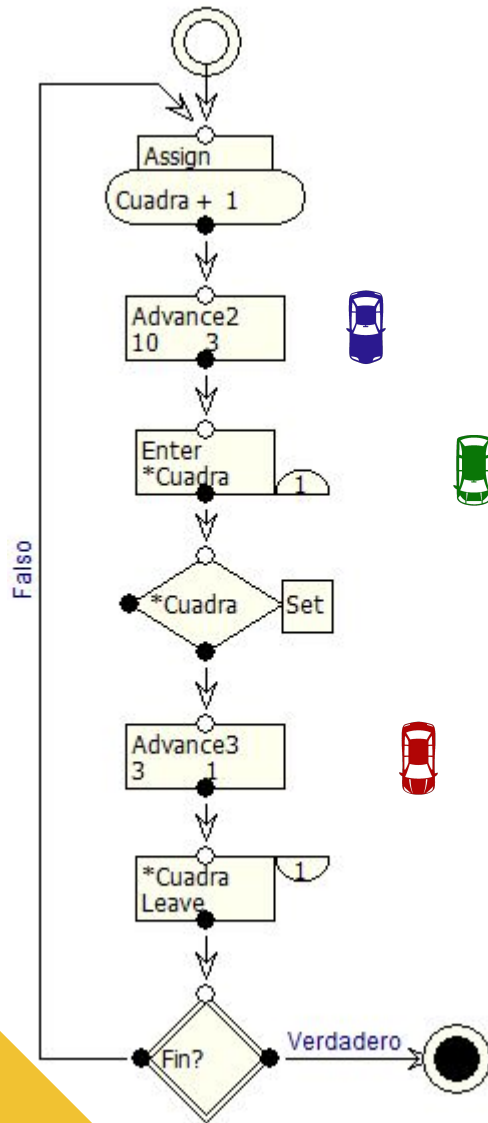
Controlador de Semáforos



Vehículos circulando

Módulo recorrido de vehículos

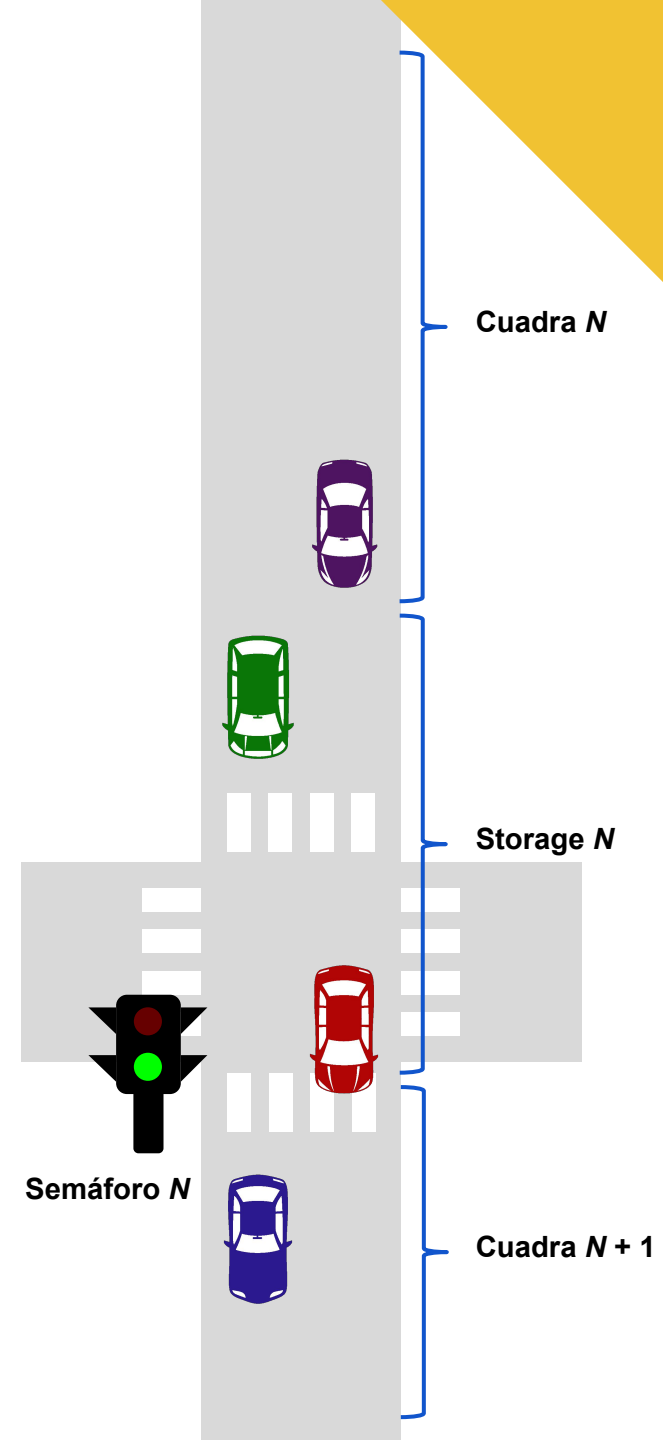
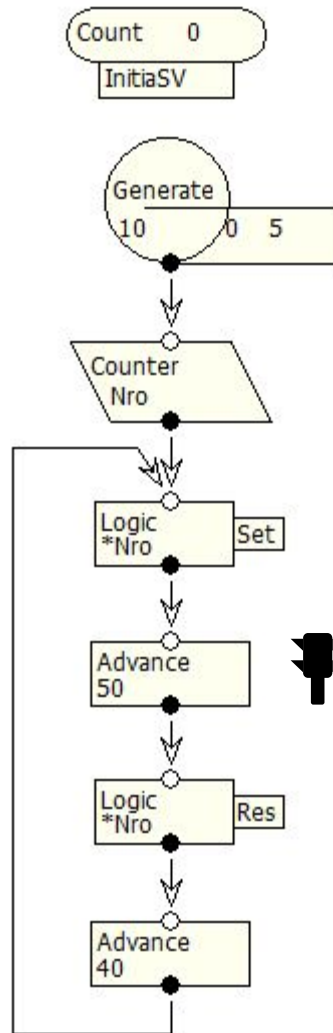
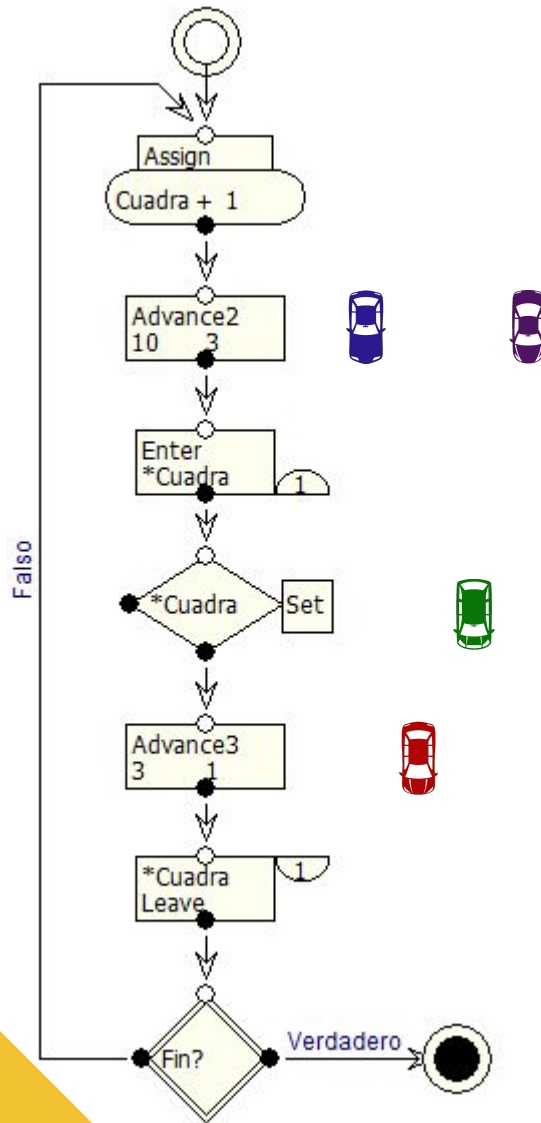
Controlador de Semáforos



Vehículos circulando

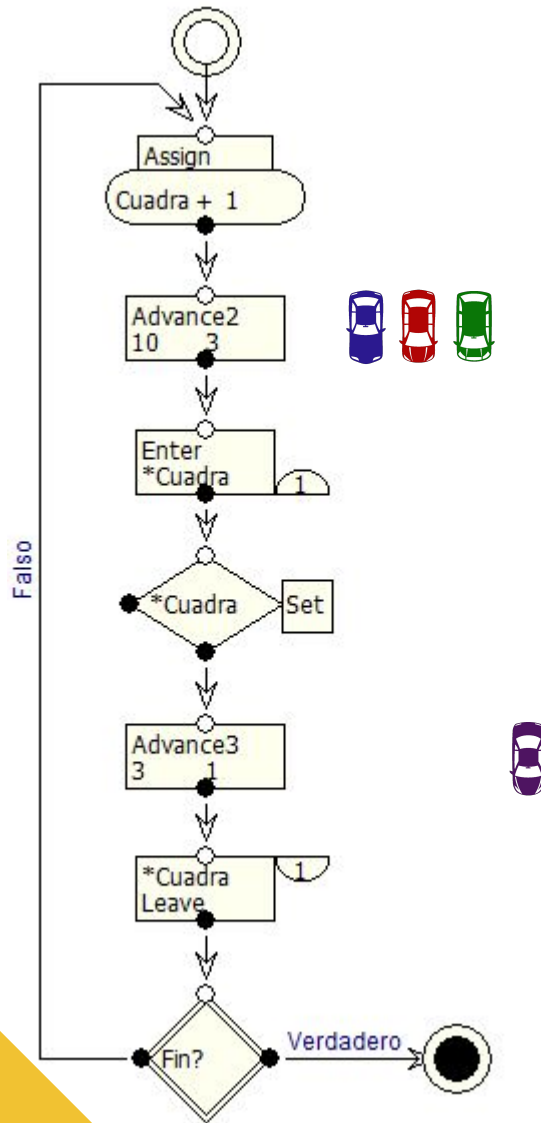
Módulo recorrido de vehículos

Controlador de Semáforos

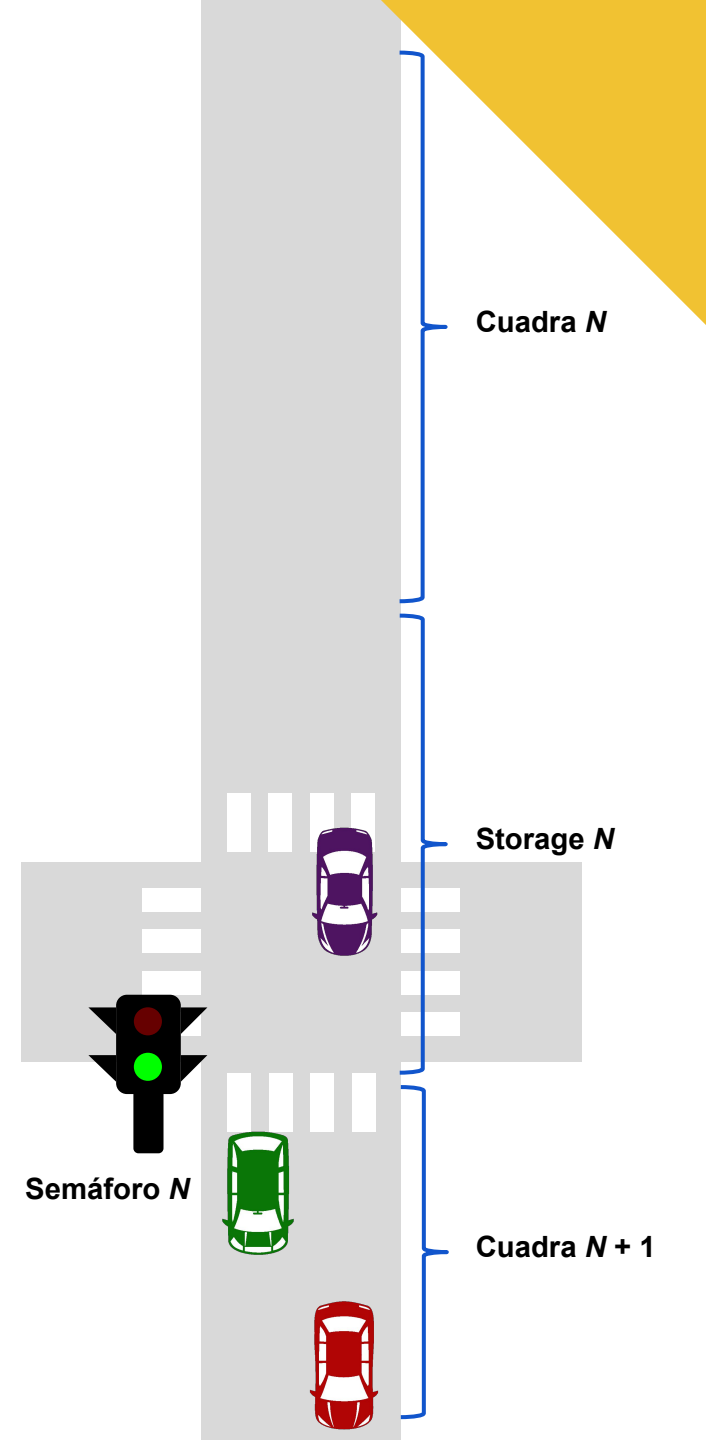
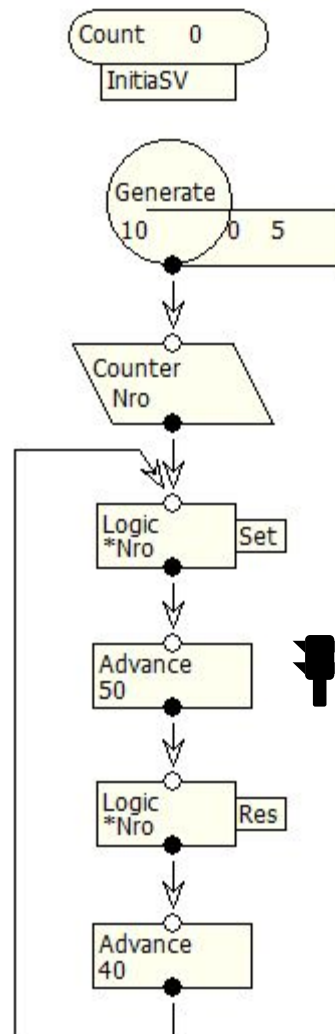


Vehículos circulando

Módulo recorrido de vehículos

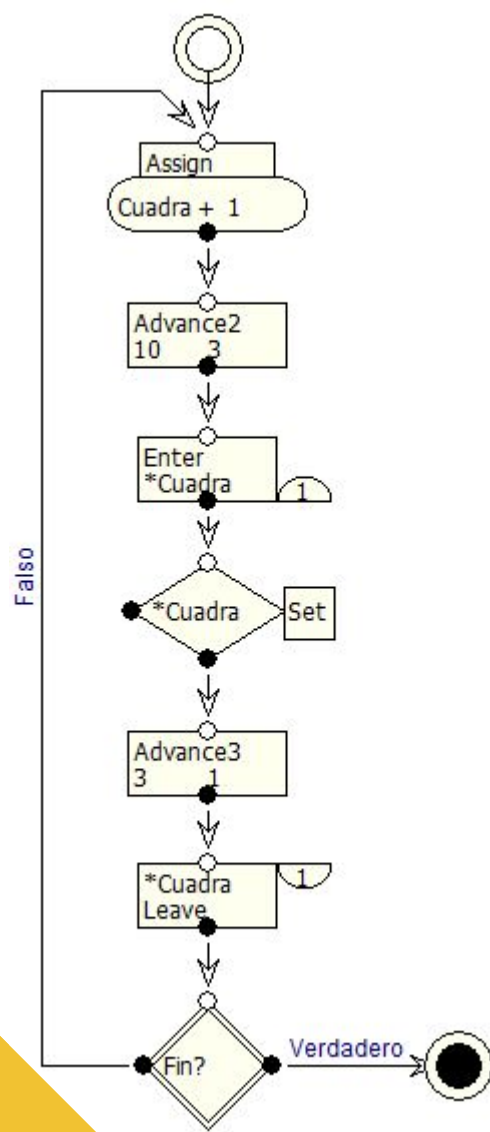


Controlador de Semáforos



50 Cuadras con 50 cruces

Módulo recorrido de vehículos



Definición de Storages

StorageDef 1	StorageDef 11	StorageDef 21	StorageDef 31	StorageDef 41
StorageDef 2	StorageDef 12	StorageDef 22	StorageDef 32	StorageDef 42
StorageDef 3	StorageDef 13	StorageDef 23	StorageDef 33	StorageDef 43
StorageDef 4	StorageDef 14	StorageDef 24	StorageDef 34	StorageDef 44
StorageDef 5	StorageDef 15	StorageDef 25	StorageDef 35	StorageDef 45
StorageDef 6	StorageDef 16	StorageDef 26	StorageDef 36	StorageDef 46
StorageDef 7	StorageDef 17	StorageDef 27	StorageDef 37	StorageDef 47
StorageDef 8	StorageDef 18	StorageDef 28	StorageDef 38	StorageDef 48
StorageDef 9	StorageDef 19	StorageDef 29	StorageDef 39	StorageDef 49
StorageDef 10	StorageDef 20	StorageDef 30	StorageDef 40	StorageDef 50

Semáforos

Con llaves lógicas (Logic Switchs)



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