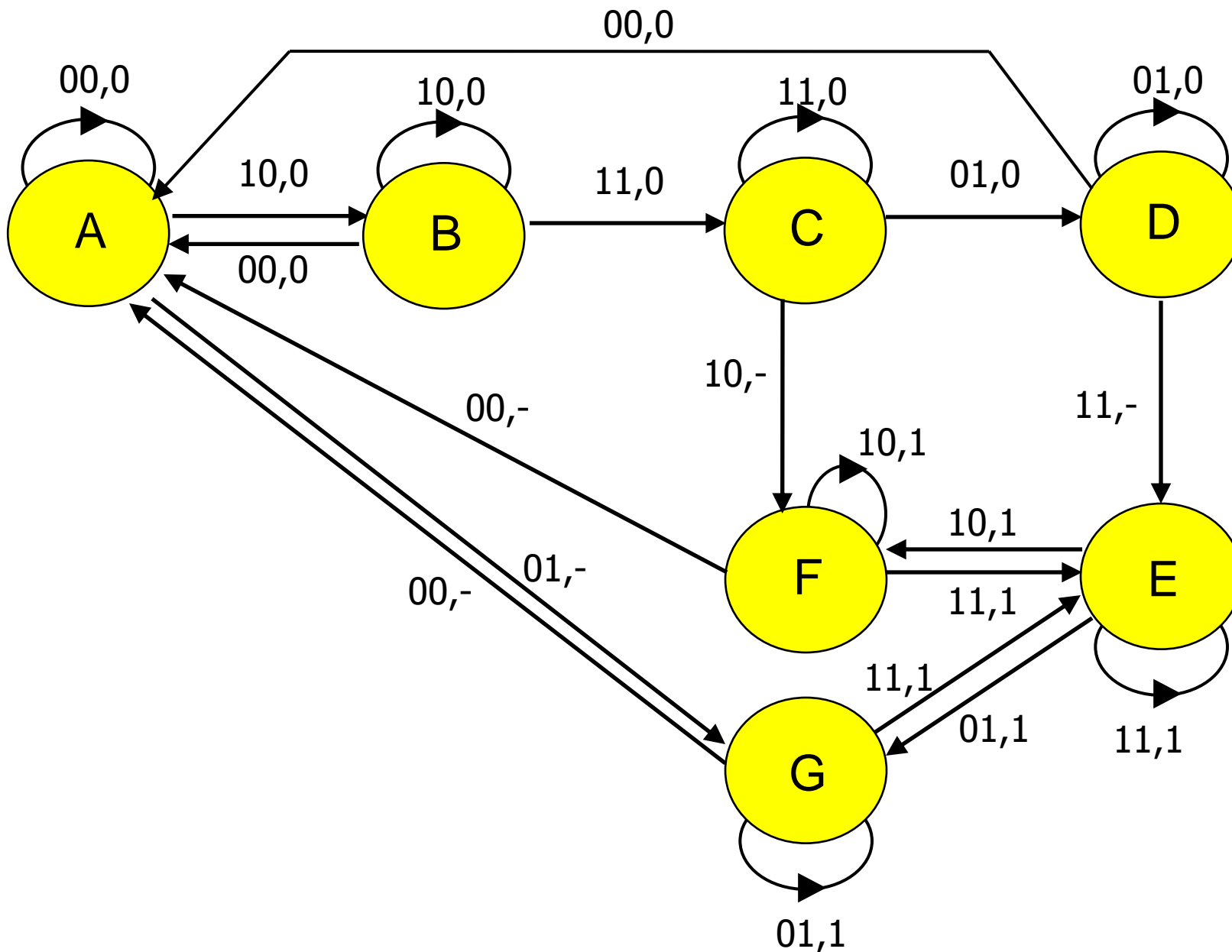


Esercizio 1.1



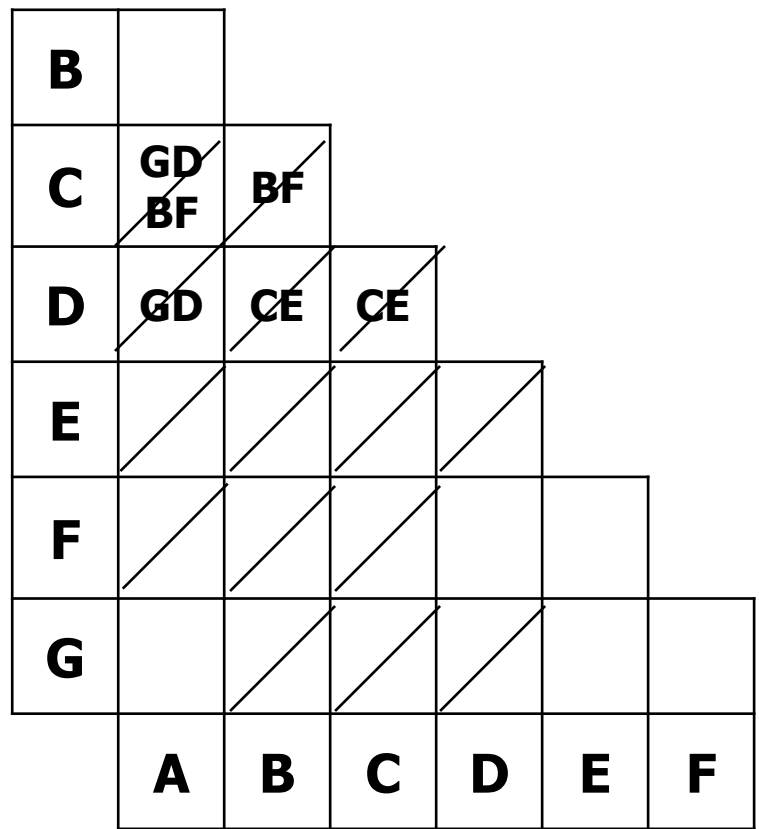
Esercizio 1.2 – Tabella triangolare e CMC

TP

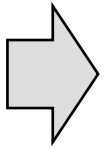
s.p.

		00	01	11	10
A	A,0	G,-	-, -	B,0	
B	A,0	-, -	C,0	B,0	
C	-, -	D,0	C,0	F,-	
D	A,0	D,0	E,-	-, -	
E	-, -	G,1	E,1	F,1	
F	A,-	-, -	E,1	F,1	
G	A,-	G,1	E,1	-, -	

s.f., E



AB, AG, DF, EF, EG, FG, C



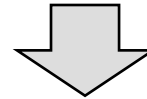
a={AB}, b={C},
c={DF}, d={EFG}

Esercizio 1.2 – TdF automa minimo

TP

	00	01	11	10
s.p. a=AB	a,0	d,-	b,0	a,0
b = C	-, -	c,0	b,0	c/d,-
c = DF	a,-	c,0	d,-	c/d,1
d = EFG	a,-	d,1	d,1	c/d,1

s.f., E




TP

	00	01	11	10
s.p. a=AB	a,0	d,-	b,0	a,0
b = C	-, -	c,0	b,0	c,-
c = DF	a,-	c,0	d,-	c,1
d = EFG	a,-	d,1	d,1	d,1

s.f., E

Esercizio 1.3 – Grafo adiacenze e TdT

Z	0		1
0	a	→	b
	↕		↓
1	d	←	c

La transizione $c \rightarrow a$ viene sostituita con una transizione multipla $c \rightarrow d \rightarrow a$

		TP			
		00	01	11	10
s.p.	00	00,0	10,-	01,0	00,0
	01	-, -	11,0	01,0	11,-
	11	10,0	11,0	10,-	11,1
	10	00,0	10,1	10,1	10,1
		s.f., E			

Esercizio 1.4 – Mappe di Karnaugh

		TP			
		00	01	11	10
Y ₁ Y ₀	00	0	-	0	0
	01	-	0	0	-
	11	0	0	-	1
	10	0	1	1	1
		E			

$$E (SP) = T y_1 + P y_1 y_0'$$

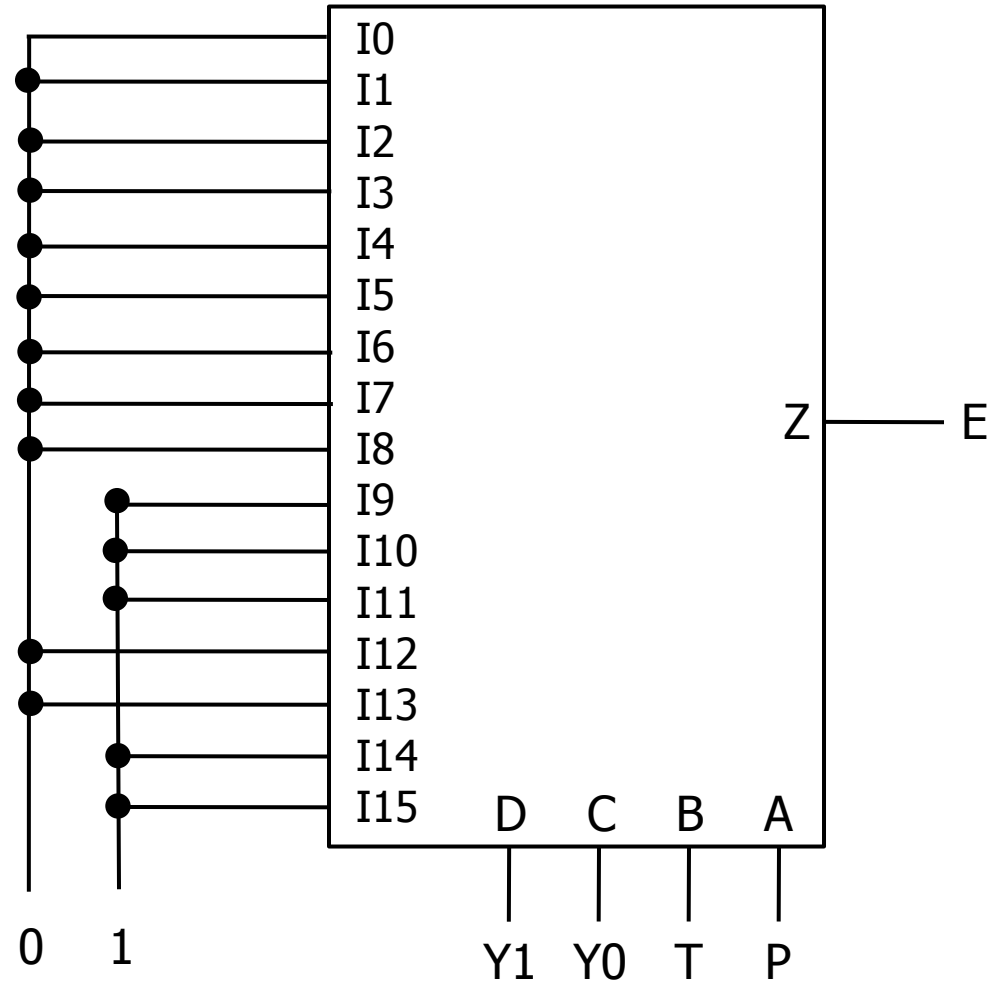
Esercizio 1.4 – Mappe di Karnaugh

		TP			
		00	01	11	10
Y ₁ Y ₀	00	0	0	1	0
	01	-	1	1	1
	11	0	1	0	1
	10	0	0	0	0

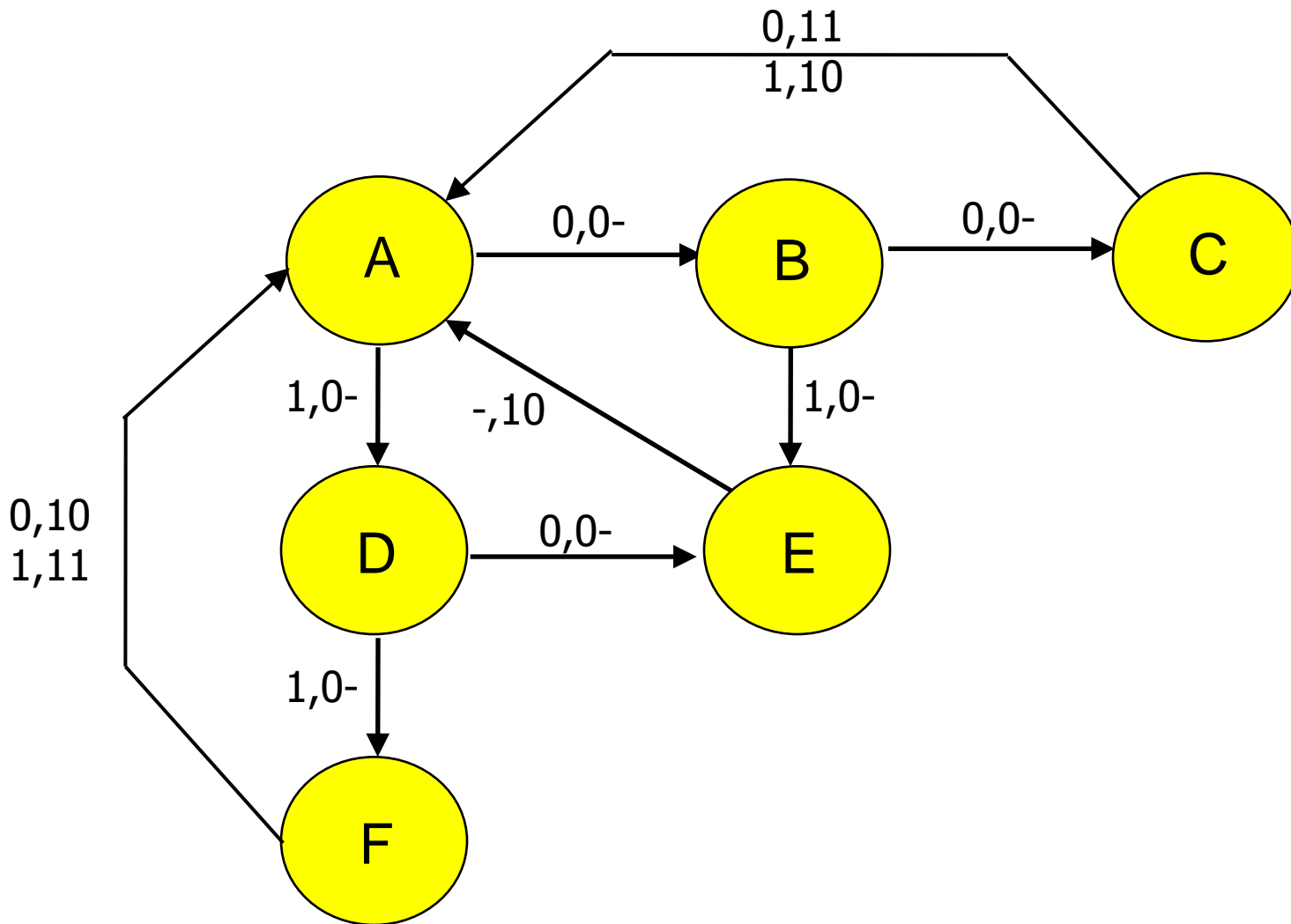
Y₀

$$Y_0 \text{ (SP)} = T' P y_0 + T P' y_0 + y_1' y_0 + T P y_1'$$

Esercizio 1.5 – Sintesi con MUX



Esercizio 2.1



Esercizio 2.2 – TdF e TdT

s.p.

		X	
		0	1
A	B,0-	D,0-	
B	C,0-	E,0-	
C	A,11	A,10	
D	E,0-	F,0-	
E	A,10	A,10	
F	A,10	A,11	

s.f., AB

y₂y₁y₀

		X	
		0	1
A=000	001,0-	010,0-	
B=001	011,0-	100,0-	
C=011	000,11	000,10	
D=010	100,0-	101,0-	
E=100	000,10	000,10	
F=101	000,10	000,11	
111	---	---	
110	---	---	

Y₂Y₁Y₀,AB

Esercizio 2.3 – Mappe di Karnaugh

xy_2

	y_1y_0			
	00	01	11	10
00	0	0	1	0
01	1	1	-	-
11	1	1	-	-
10	0	0	1	0

A

$$A = y_1y_0 + y_2$$

Esercizio 2.3 – Mappe di Karnaugh

		$y_1 y_0$			
		00	01	11	10
$x y_2$	00	-	-	1	-
	01	0	0	-	-
	11	0	1	-	-
	10	-	-	0	-

$$B = x y_2 y_0 + x' y_2'$$

Esercizio 2.4 – Sintesi con SR

