

## Corrigé type NI911

Exercice 1 : (3 pts)

$$1. X_0 = \overline{X_1} \cdot (X_3 \cdot S_0 + X_0)$$

$$X_1 = \overline{X_2} \cdot (X_0 \cdot S_0 \cdot S_3 \cdot S_2 + X_1)$$

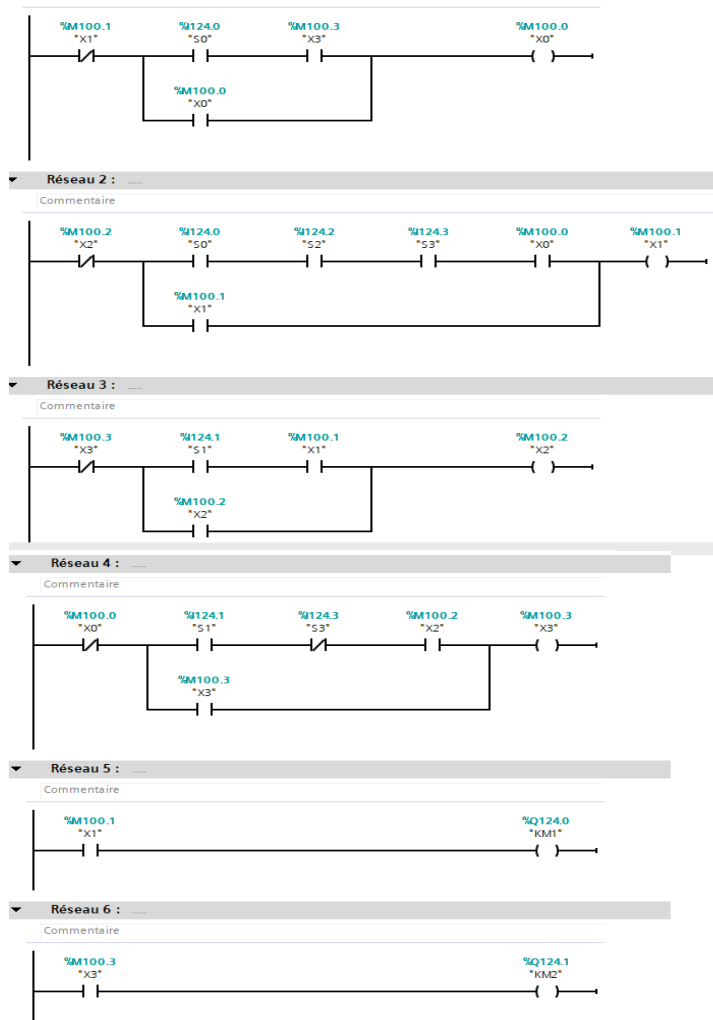
$$X_2 = \overline{X_3} \cdot (X_1 \cdot S_1 + X_2)$$

$$X_3 = \overline{X_0} \cdot (X_2 \cdot S_1 \cdot \overline{S_3} + X_3)$$

2. Table des entrées / sorties (2 pts)

Entrées	Adresses
S0	I124.0
S1	I124.1
S2	I124.2
S3	I124.3
Ps	I124.3
Sorties	Adresses
KM1	Q124.0
KM2	Q124.1
Mémento	Adresses
X0	M100.0
X1	M100.0
X2	M100.0
X3	M100.0

3. Programme Ladder (3pts)



Exercice 2 :

1. Table des entrées (4 pts)

Entrées	Adresses
Marche	I124.0
a0	I124.1
b0	I124.2
b1	I124.3
Ps	I124.3
Sorties	Adresses
a+	Q124.0
a-	Q124.1
b+	Q124.2
KM	Q124.3

2. Programme Grafcet : (8pts)

