

Sequence Function

Eka Maulana, ST, MT, MEng.

Fungsi Unique dan Squence

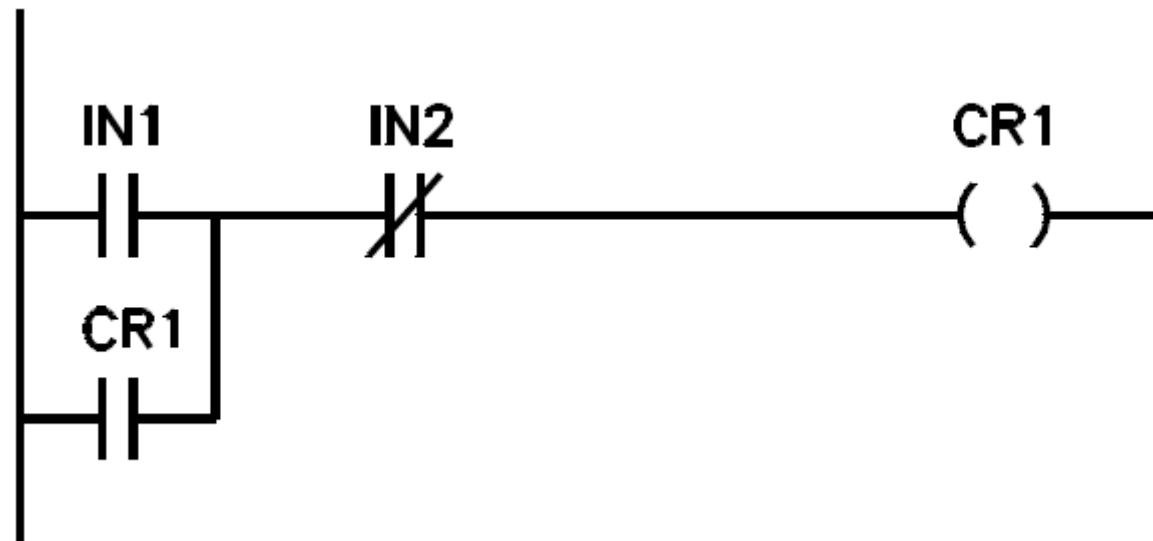
- Mengoptimalkan fungsi-fungsi khusus dalam PLC
- Membangun clock Flip-flop dengan ladder logic termasuk RS, D, T dan JK.
- Merancang operasi one-shot pada program PLC dan bagaimana penggunaannya untuk picu tepi pada FF.

RS Flip-Flop

Tabel Kebenaran

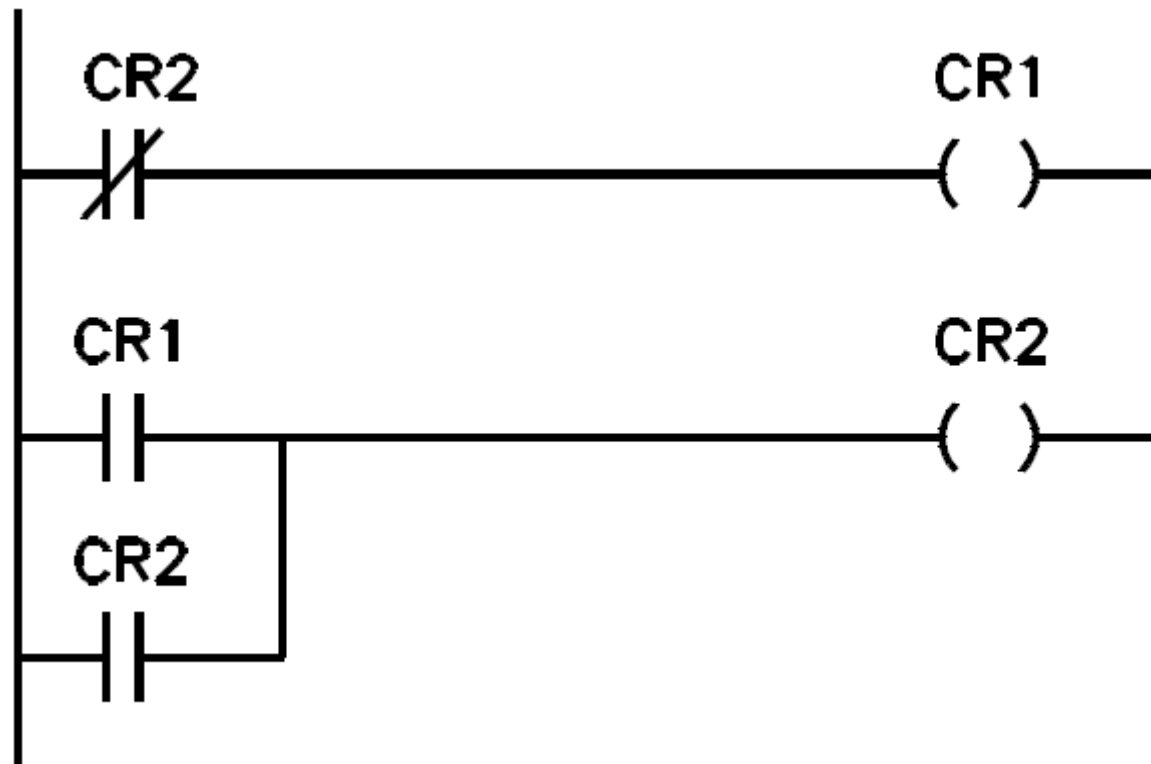
R	S	Q	Q'
0	0	Q	Q'
0	1	1	0
1	0	0	1
1	1	X	X

S = IN1, R = IN2

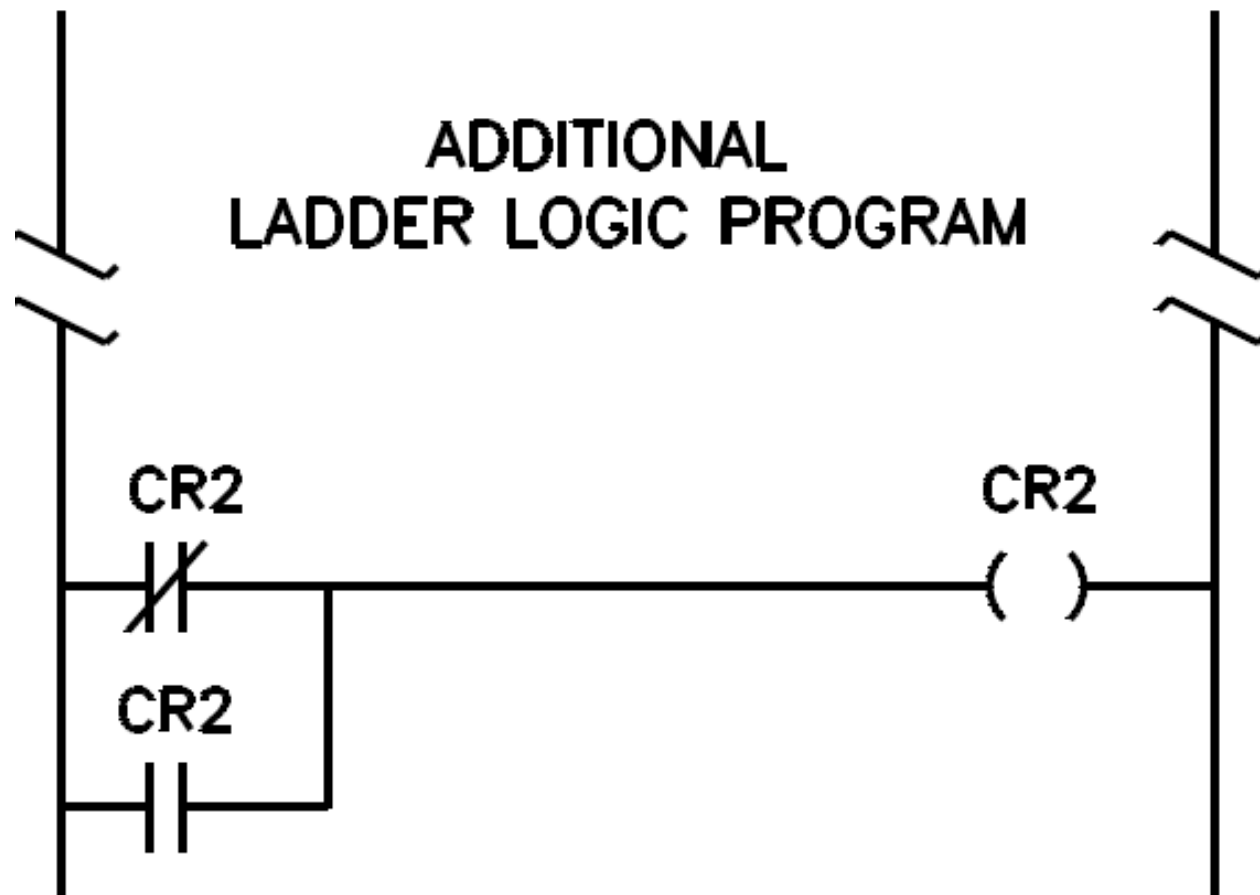


One Shot

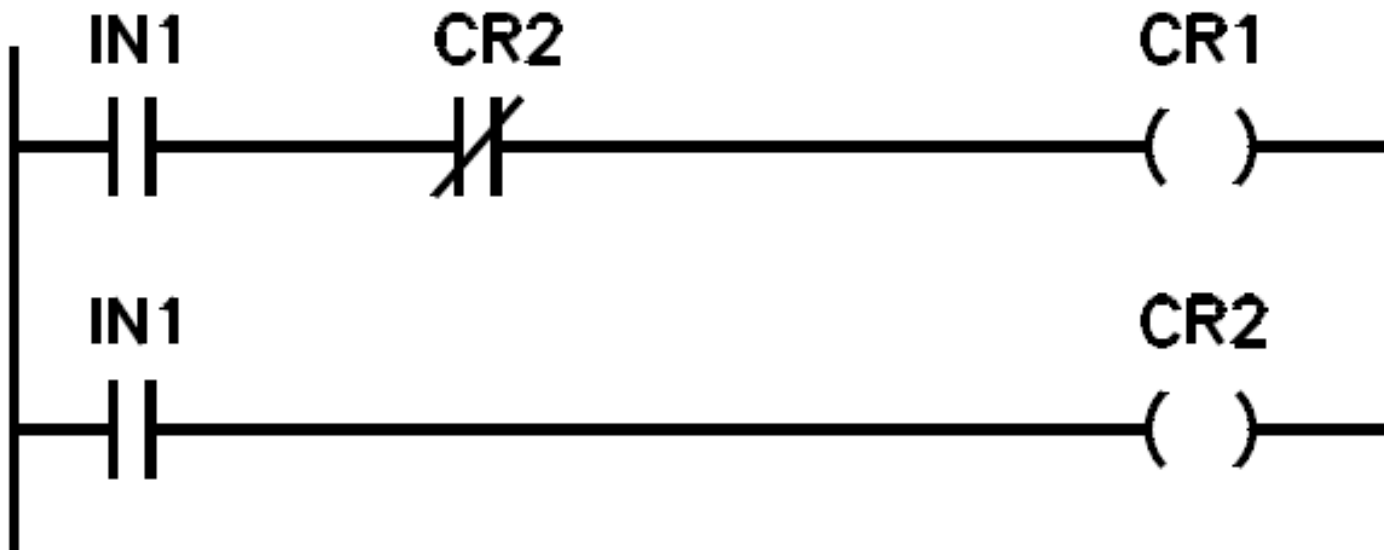
- Automatic One Shot



Penempatan One-Shot di Akhir



One-Shot Pemicu Eksternal

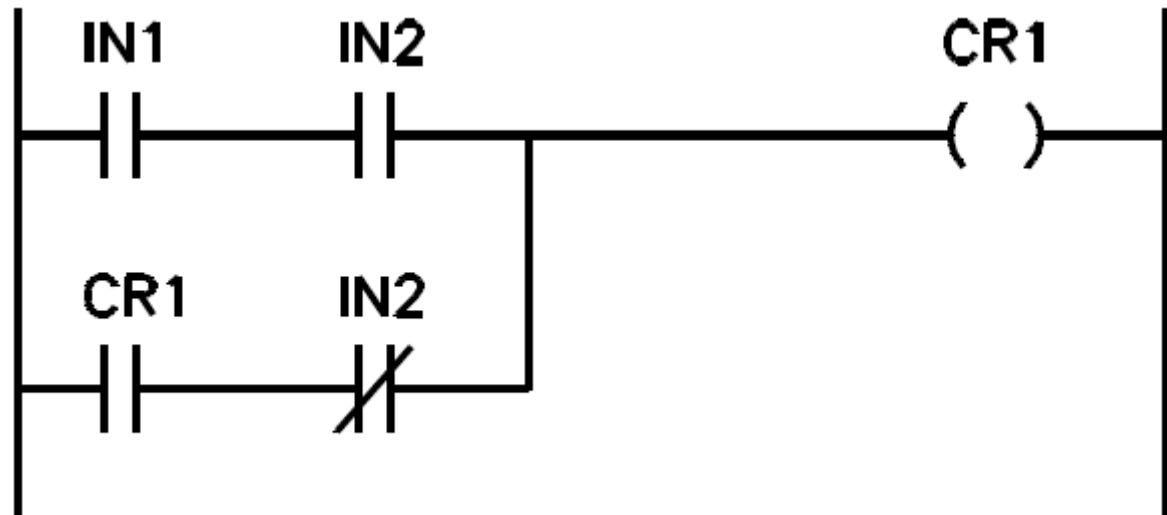


D Flip-Flop

Tabel Kebenaran

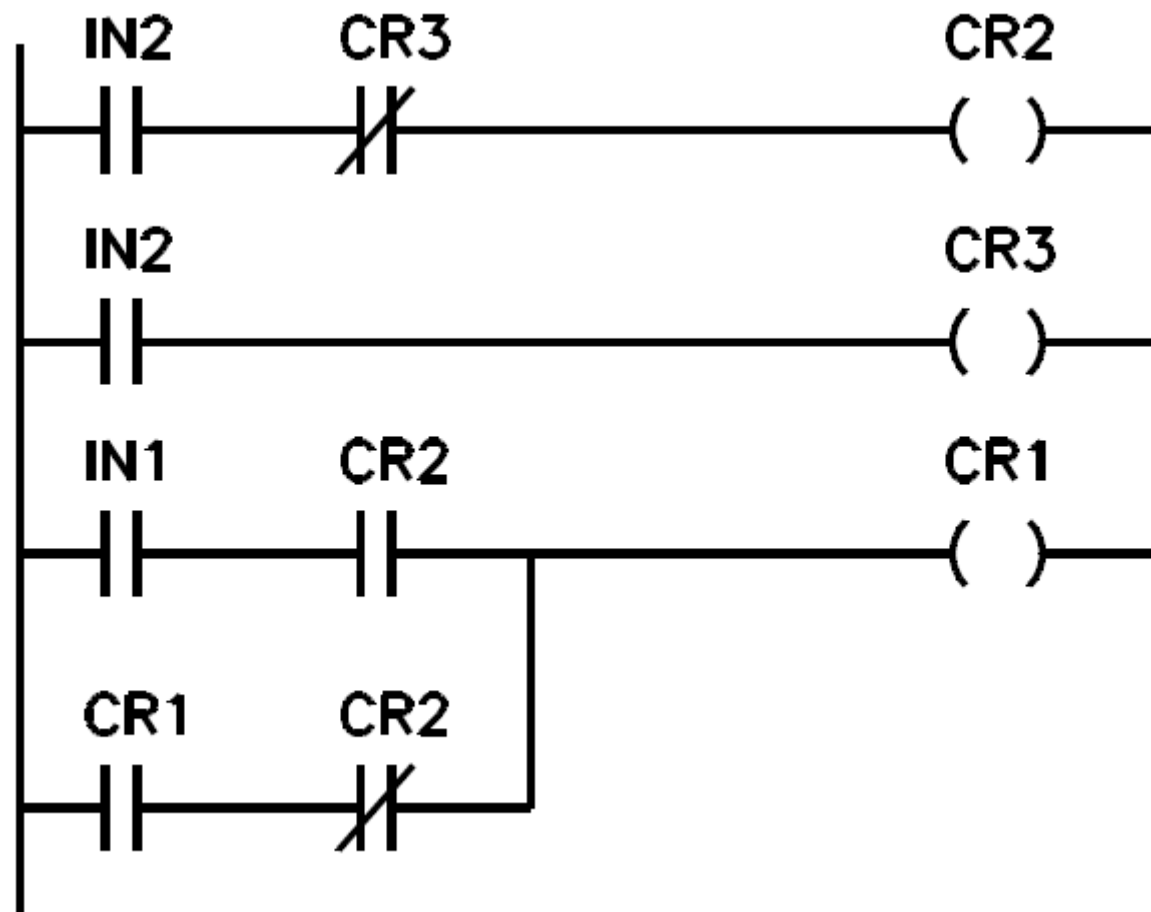
D	CL	Q_n	Q_{n+1}
0	0	X	Q_n
0	1	X	0
1	0	Q	Q_n
1	1	X	1

IN1 = D, IN2 = Trigger



D Flip-Flop

Single Scan Trigger, IN1 = D, IN2 = Trigger

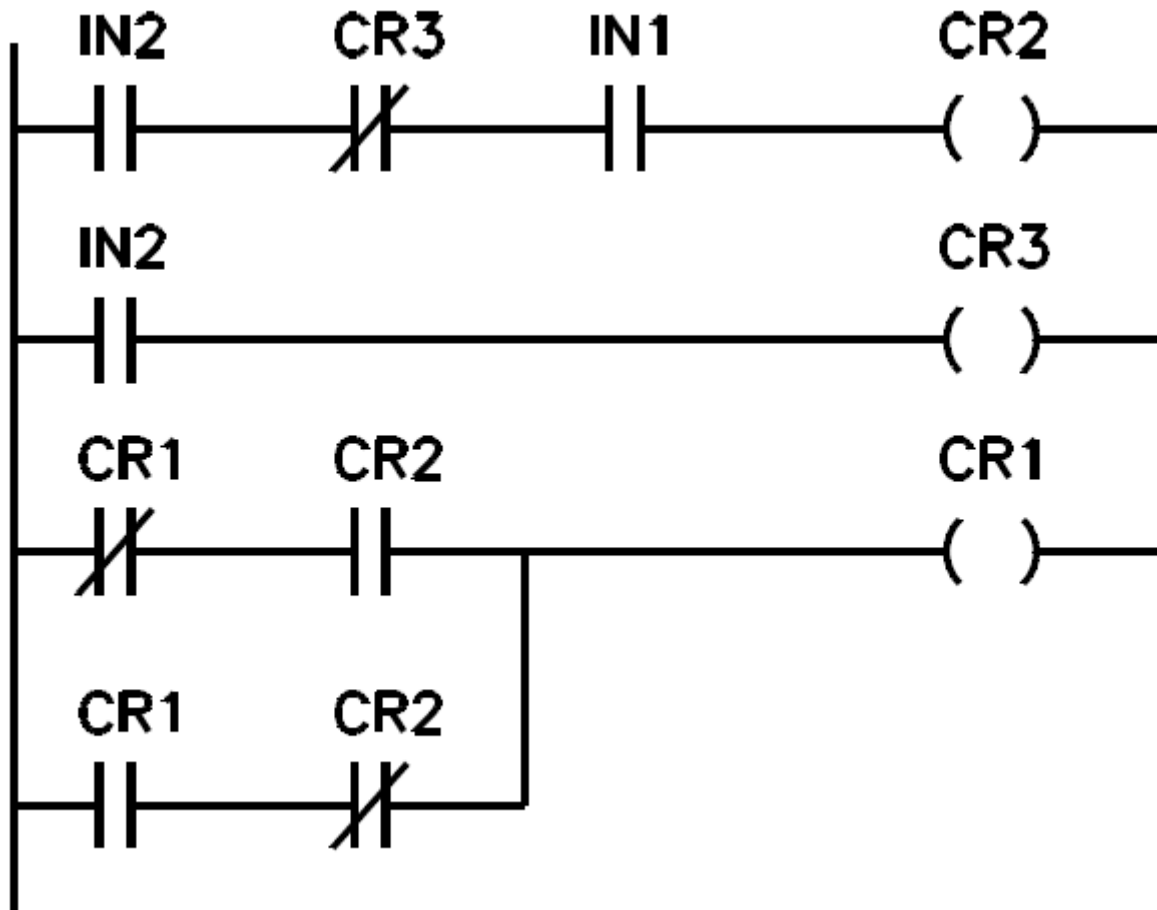


T Flip-Flop

Tabel Kebenaran

T	CL	Q_n	Q_{n+1}
0	0	X	Q_n
0	1	X	Q_n
1	0	Q	Q_n
1	1	Q	Q_n'

IN1 = T, IN2 = Trigger

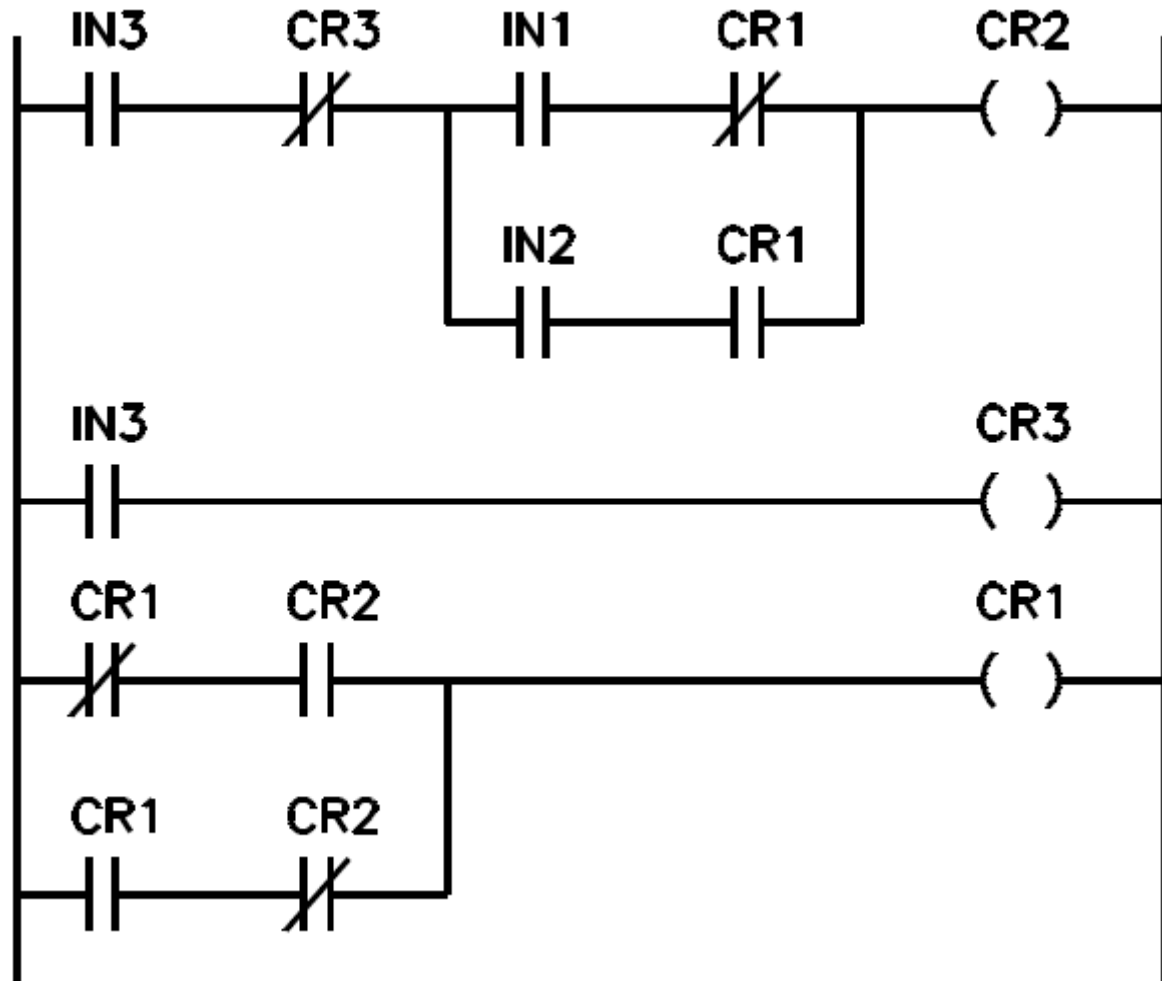


JK Flip-Flop

Tabel Kebenaran

J	K	CL	Q_n	Q_{n+1}
0	0	1	Q_n	Q_n
0	1	1	X	0
1	0	1	X	1
1	1	1	Q_n	Q_n'
X	X	0	Q_n	Q_n

IN1 = J, IN2 = K, IN3 = Trigger



Squencer

