

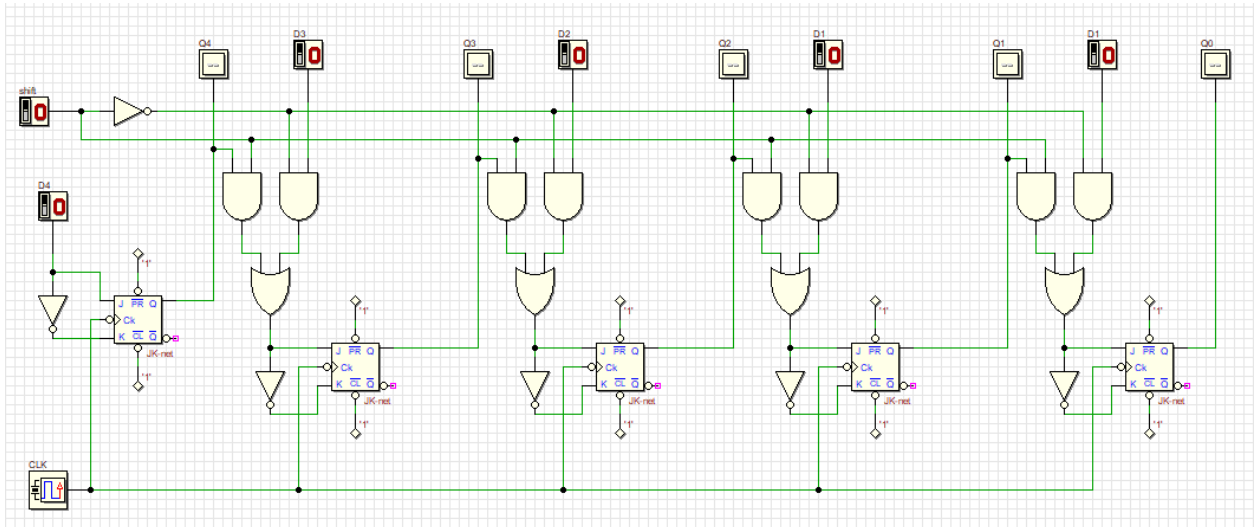
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Kelas : 1D4 Teknik Komputer B

### Latihan Soal Shift Register

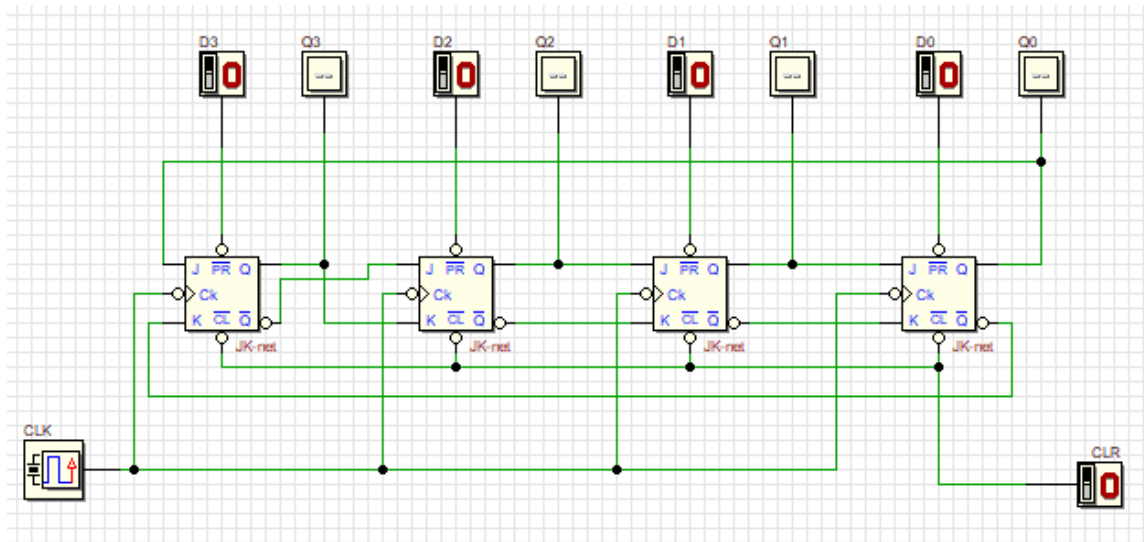
#### 1. Rangkaian



Tabel Kebenaran

	clk	Q <sub>4</sub>	Q <sub>3</sub>	Q <sub>2</sub>	Q <sub>1</sub>	Q <sub>0</sub>	Serial Output
<input type="checkbox"/>	0	1	0	0	1	0	-----
<input type="checkbox"/>	1	0	1	0	0	1	0-----
<input type="checkbox"/>	2	0	0	1	0	0	10----
<input type="checkbox"/>	3	0	0	0	1	0	010--
<input type="checkbox"/>	4	0	0	0	0	1	0010-
<input type="checkbox"/>	5	0	0	0	0	0	10010
<input type="checkbox"/>	6	0	0	0	0	0	01001
<input type="checkbox"/>	7	0	0	0	0	0	00100
<input type="checkbox"/>	8	0	0	0	0	0	00010
<input type="checkbox"/>	9	0	0	0	0	0	00001
<input type="checkbox"/>	10	0	0	0	0	0	00000
<input type="checkbox"/>							

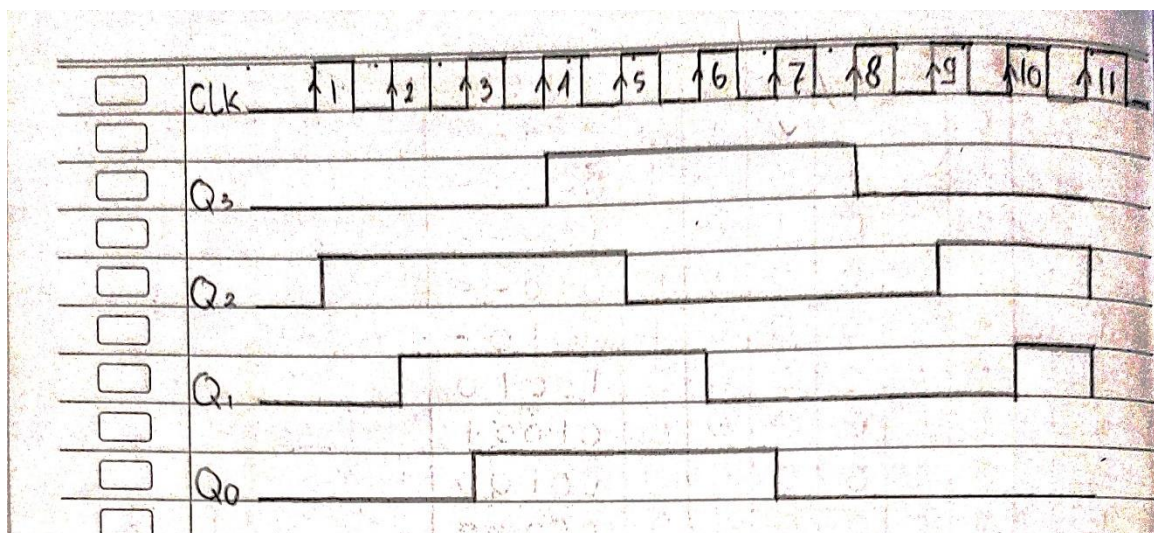
## 2. Rangkaian



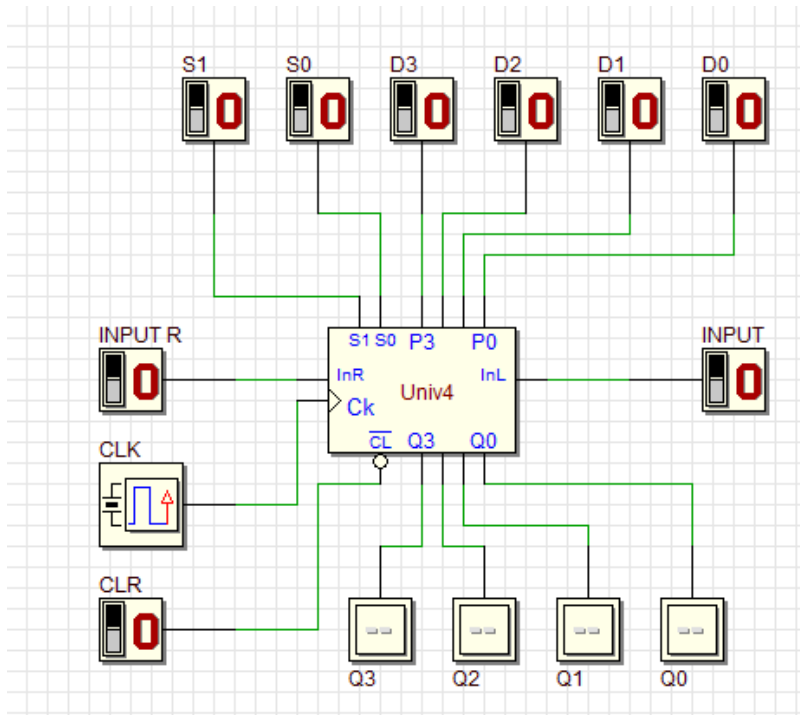
Tabel Kebenaran

Clk	Output			
	Q <sub>3</sub>	Q <sub>2</sub>	Q <sub>1</sub>	Q <sub>0</sub>
0	0	0	0	0
1	0	1	0	0
2	0	1	1	0
3	0	1	1	1
4	1	1	1	1
5	1	0	1	1
6	1	0	0	1
7	1	0	0	0
8	0	0	0	0
9	0	1	0	0
10	0	1	1	0

Timing Diagram



### 3. Rangkaian



Tabel Kebenaran

	CLK	Input				Output			
		S <sub>1</sub>	S <sub>0</sub>	D <sub>3R</sub>	D <sub>3L</sub>	Q <sub>3</sub>	Q <sub>2</sub>	Q <sub>1</sub>	Q <sub>0</sub>
	1	1	1	x	x	1	0	1	1
	2	1	0	x	1	0	1	1	1
	3	1	0	x	1	1	1	1	1
	4	1	0	x	1	1	1	1	1
	5	1	0	x	1	1	1	1	1
	6	0	1	0	x	0	1	1	1
	7	0	1	0	x	0	0	1	1
	8	0	1	0	x	0	0	0	1
	9	0	1	0	x	0	0	0	0
	10	0	0	x	x	0	0	0	0

# Timing Diagram

