Organização de Computadores

Versão Hands-on com Logisim

Prof. Juan G. Colonna
juancolonna@icomp.ufam.edu.br
Instituto de Computação (IComp)
Universidade Federal do Amazonas (UFAM)
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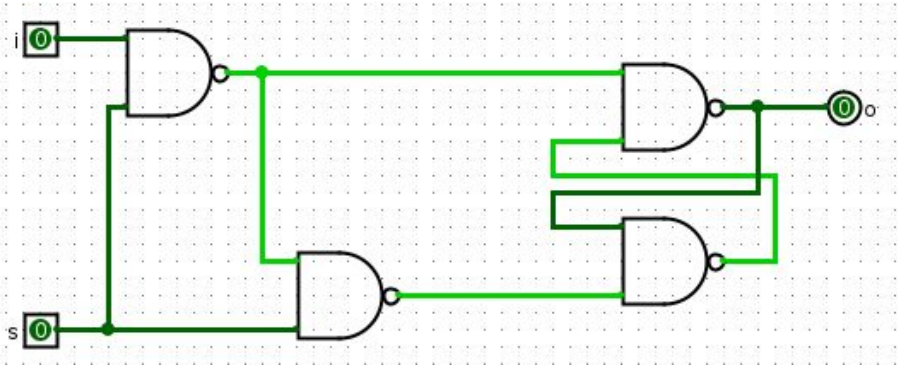
Lembrando 1 bit

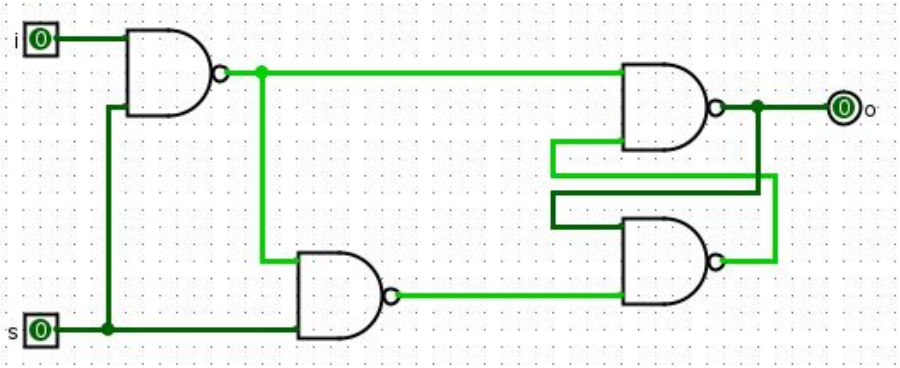
Circuito



input	set	output

0	0	1
0	1	1
1	0	1
1	1	0

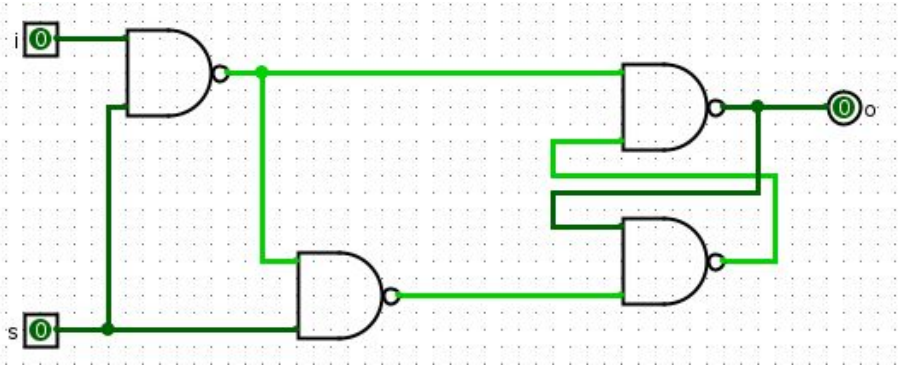
Circuito



0	0	1
0	1	1
1	0	1
1	1	0

input	set	output
0	0	x (armazenado)
1	0	x (armazenado)
0	1	0 (input)
1	1	1 (input)

Circuito



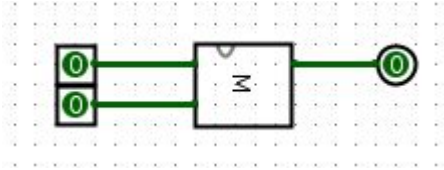
input	set	output
0	0	x (armazenado)
1	0	x (armazenado)
0	1	0 (input)
1	1	1 (input)

0	0	1
0	1	1
1	0	1
1	1	0

Testar no logisim!

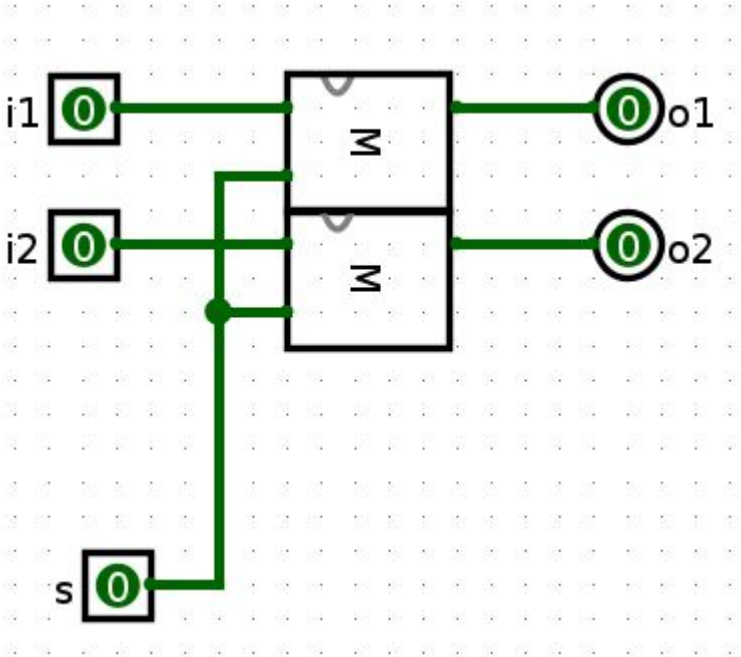
Construíndo um registrador

Memória de 1 bit

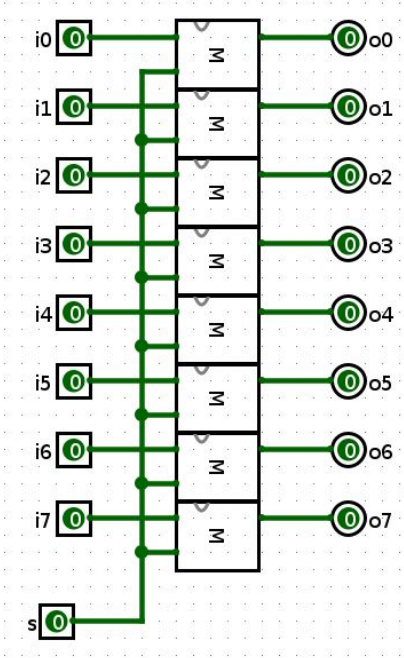


input	set	output
0	0	x (armazenado)
1	0	x (armazenado)
0	1	0 (input)
1	1	1 (input)

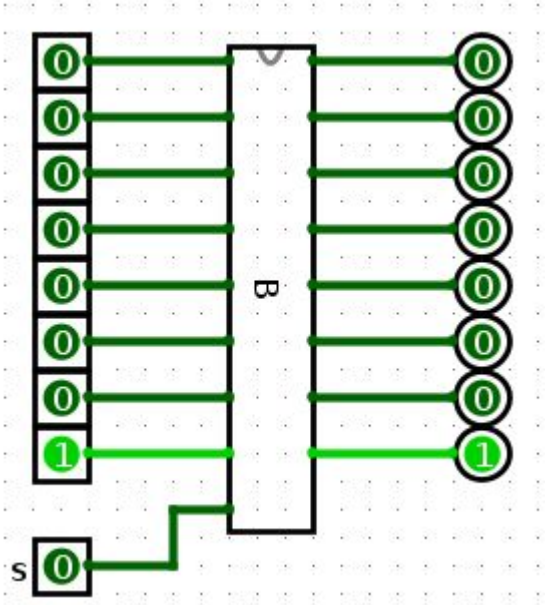
Memória de 2 bits



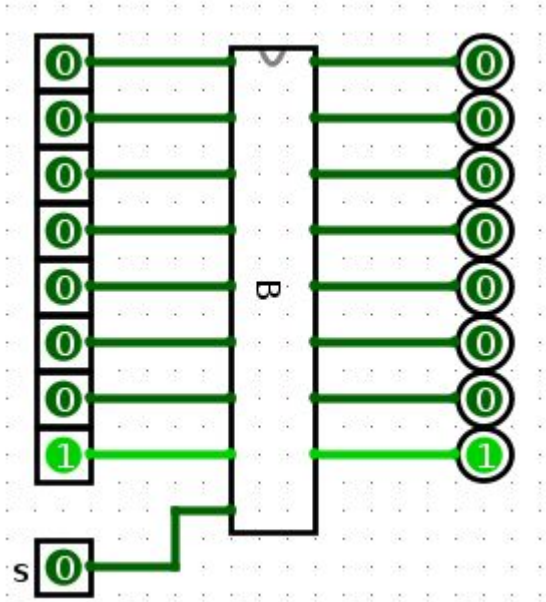
Memória de 8 bits (1 byte)

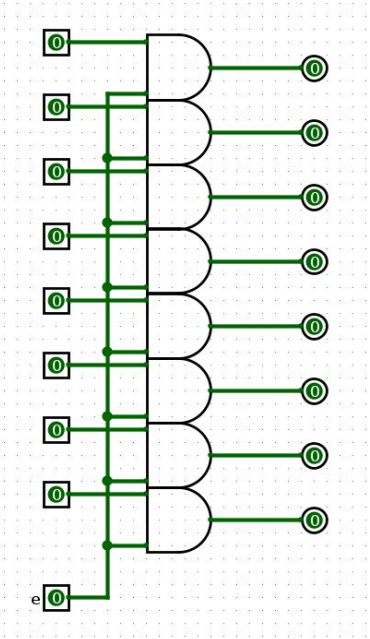


Memória de 1 byte com *set* bit



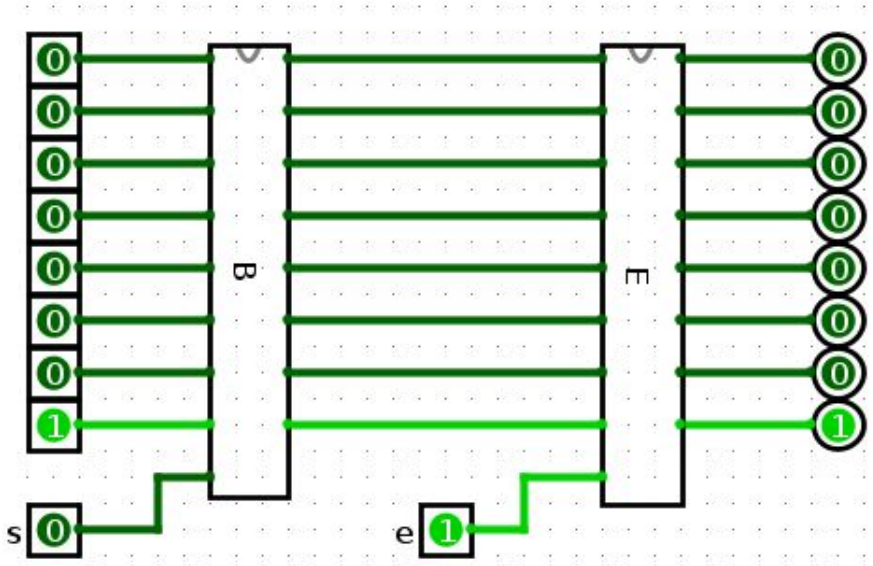
Memória: 1 byte com *set* e *enable* bits



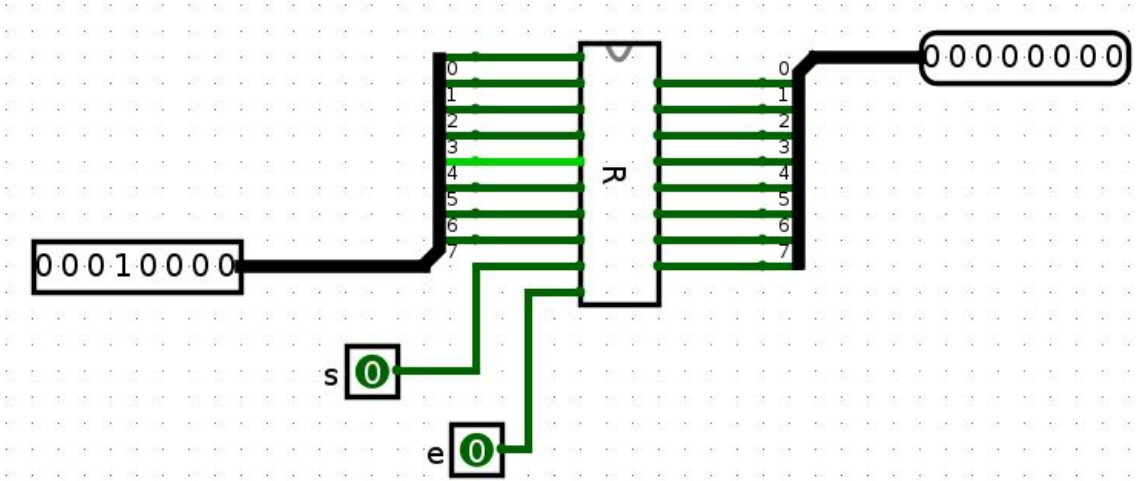


0	0	0
0	1	0
1	0	0
1	1	1

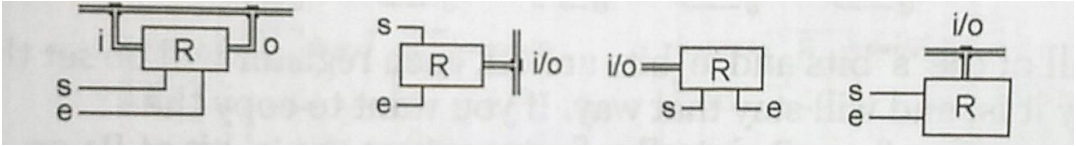
Memória: 1 byte com *set* e *enable* bits

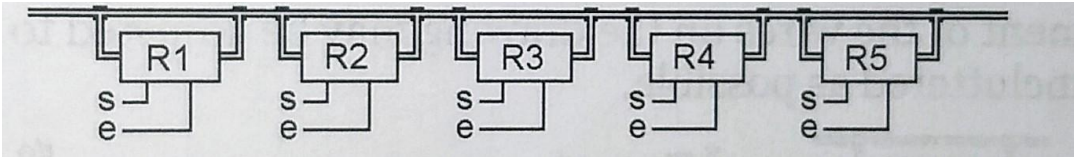


Registrador de 1 byte com *set* e *enable*



Registrador de 1 byte com *set* e *enable*





Fonte: Clark Scott, J.; But, How do it know? The basic principles of computers for everyone.
ISBN 9780615303765

Atividades

- Enviar o circuito (exemplo nome de arquivo: *aula_3_nome_sobrenome.circ*)