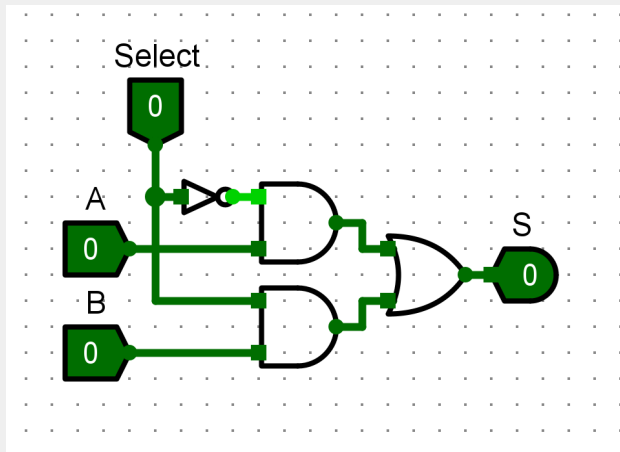


Atividade Prática 02

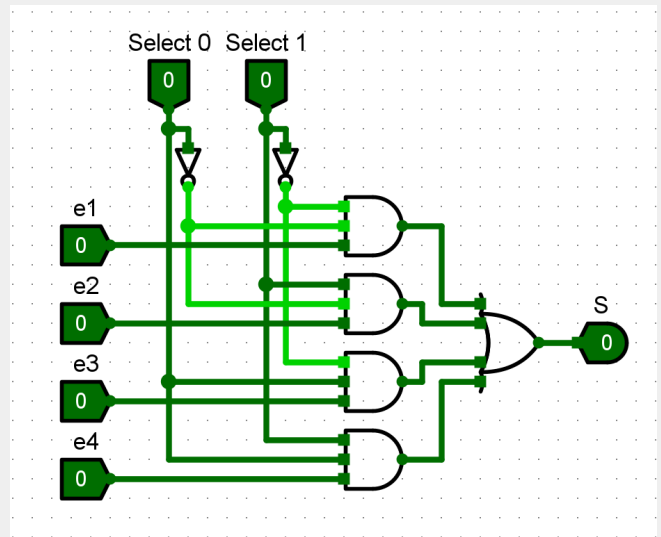
Arquitetura de Computadores II - Prof. Romanelli
Aluno: Ricardo Soares Cerqueira
Matrícula: 803833

Parte 1

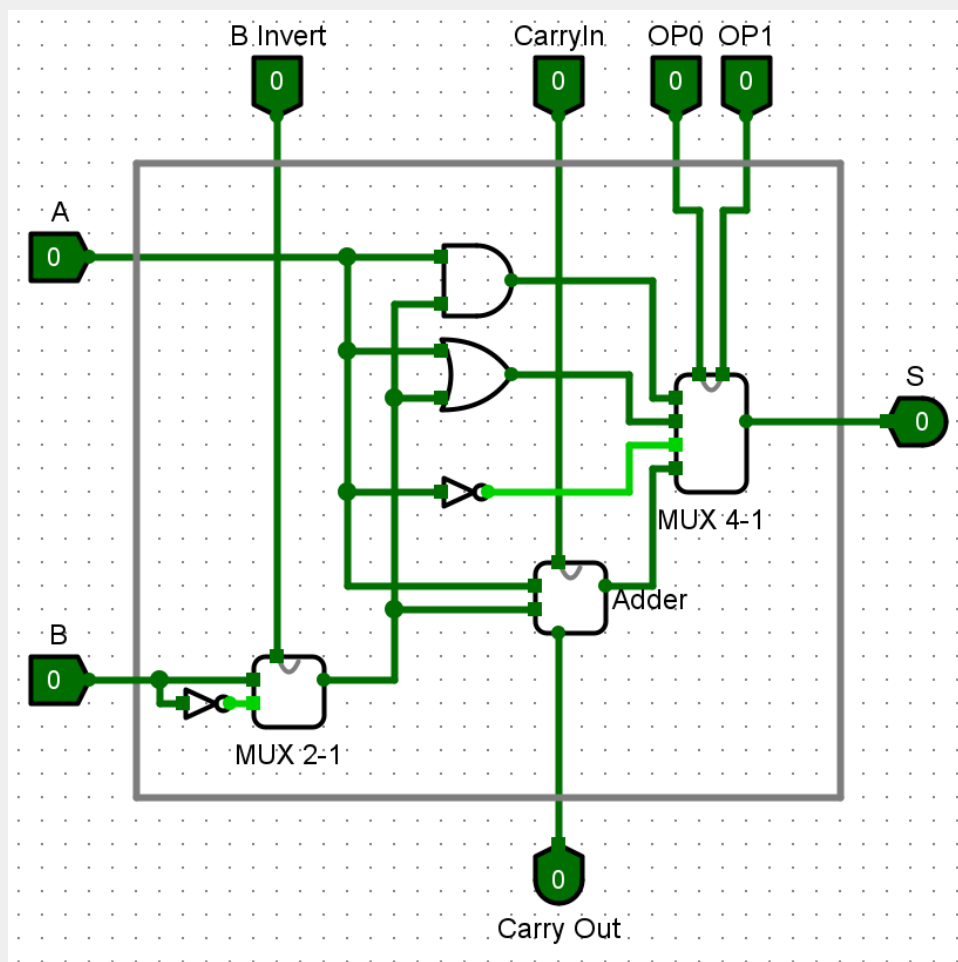
Mux 2-1



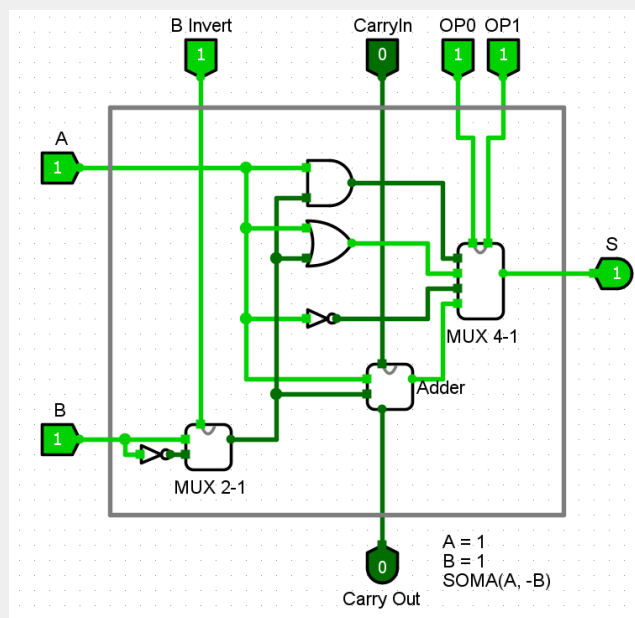
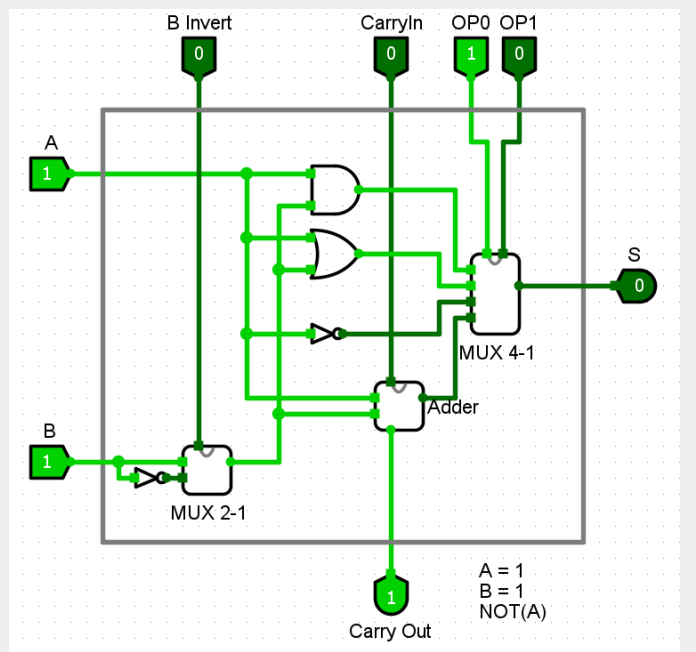
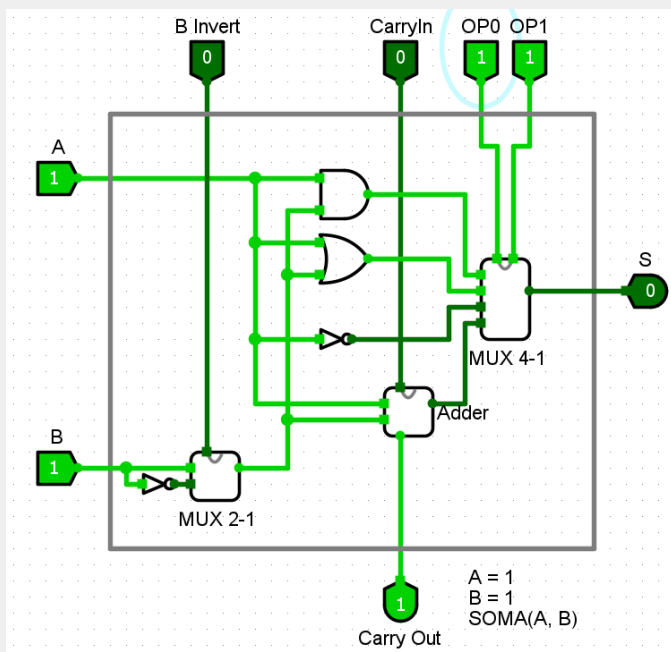
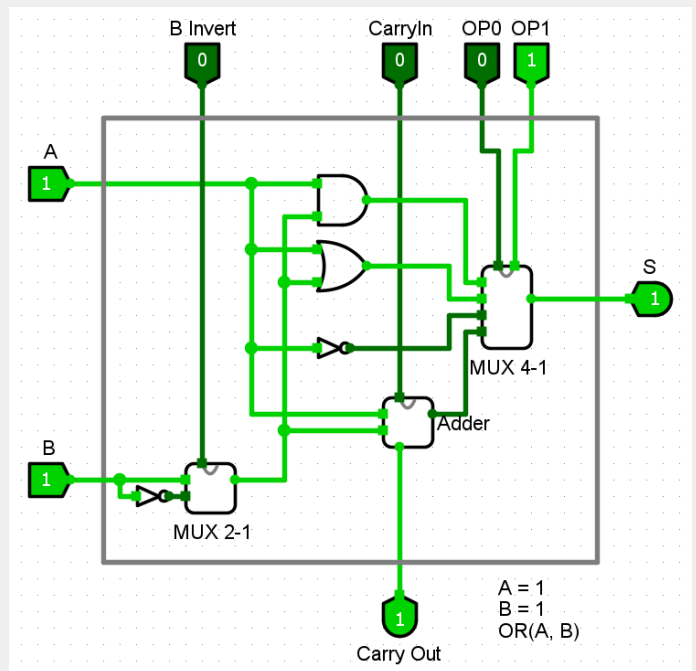
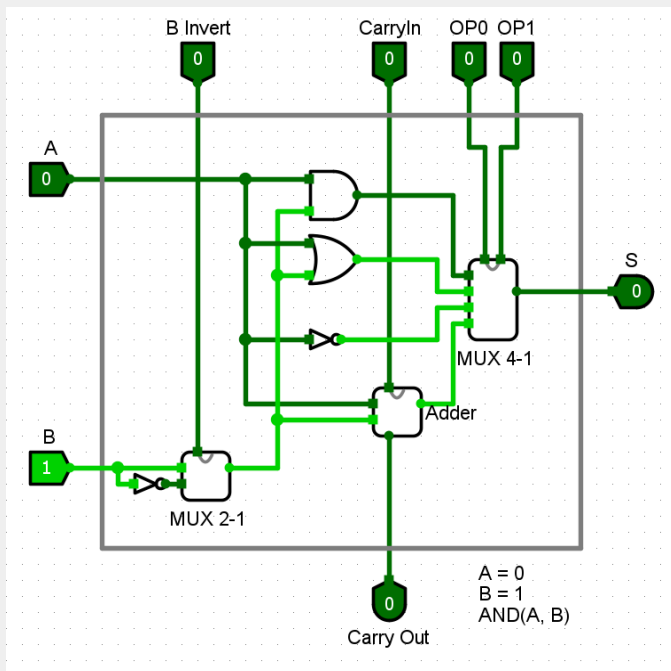
Mux 4-2



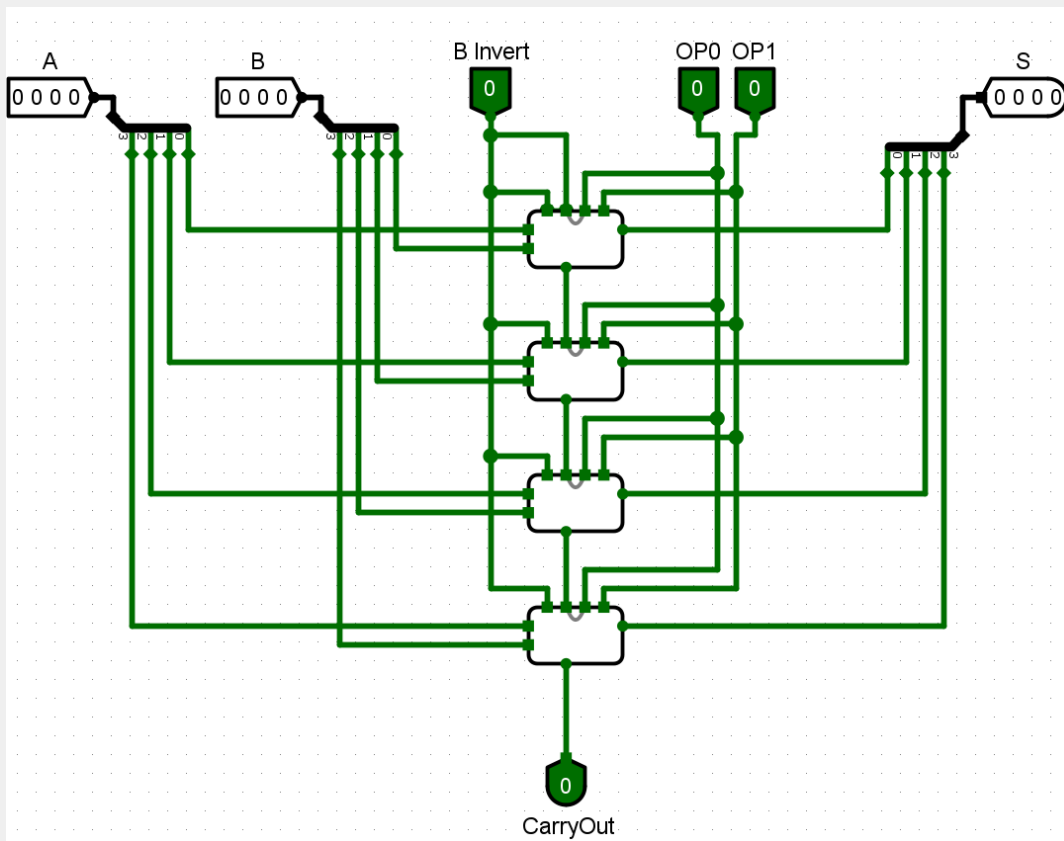
ULA 1 bit



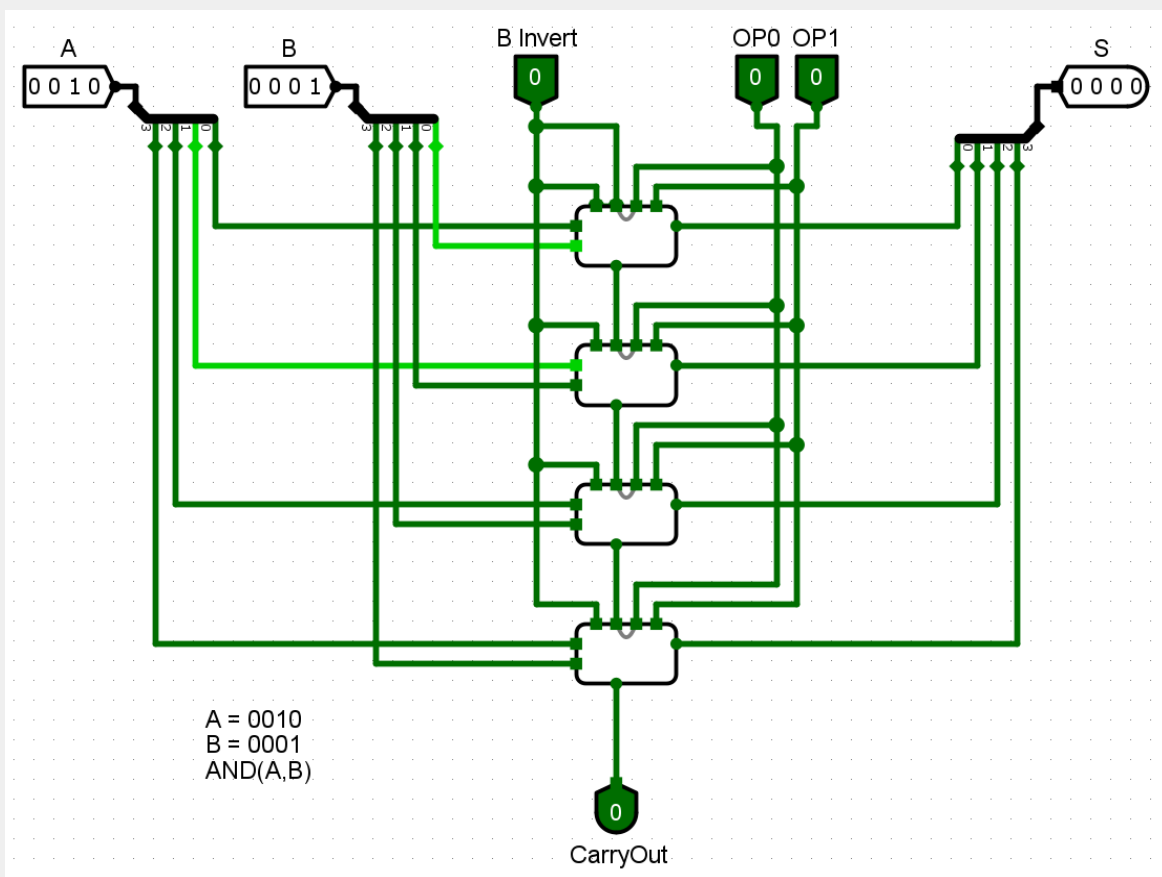
Testes:

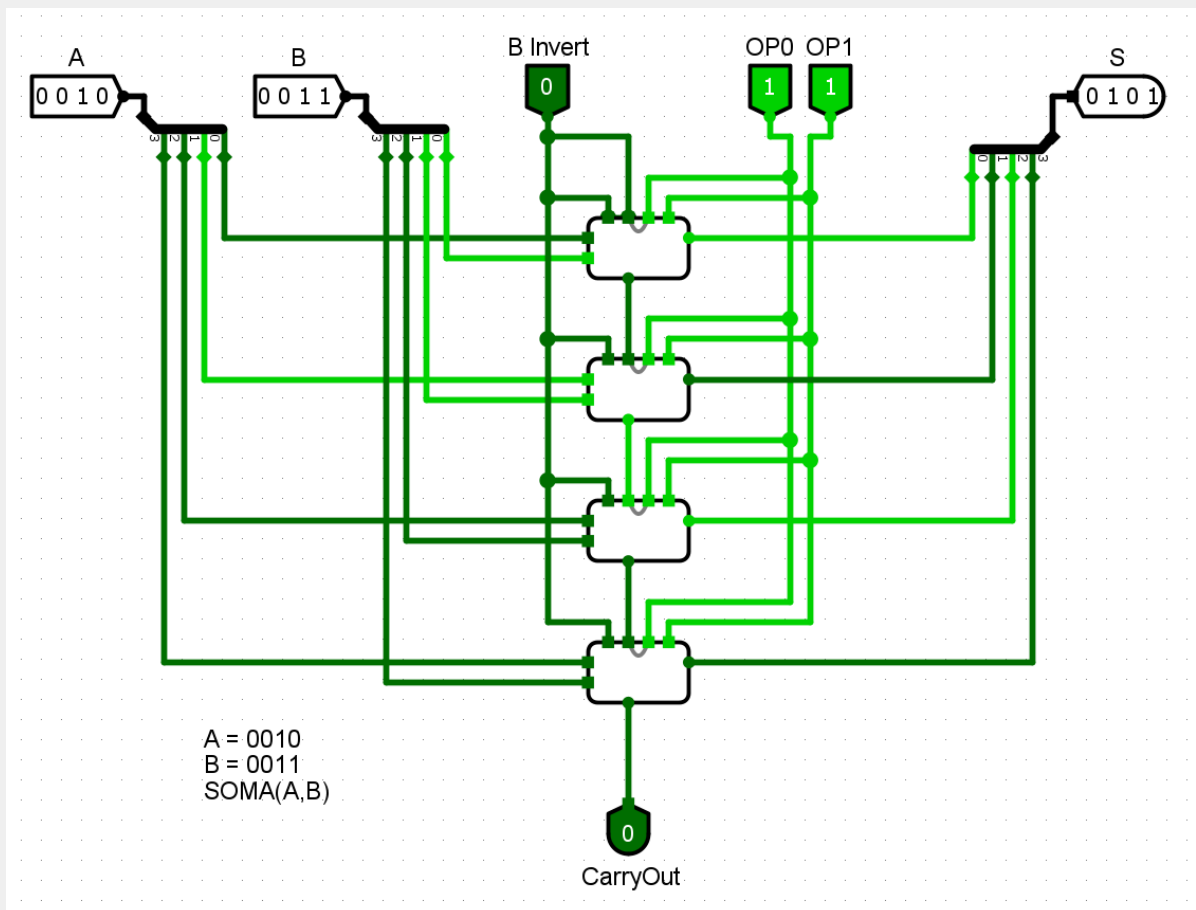
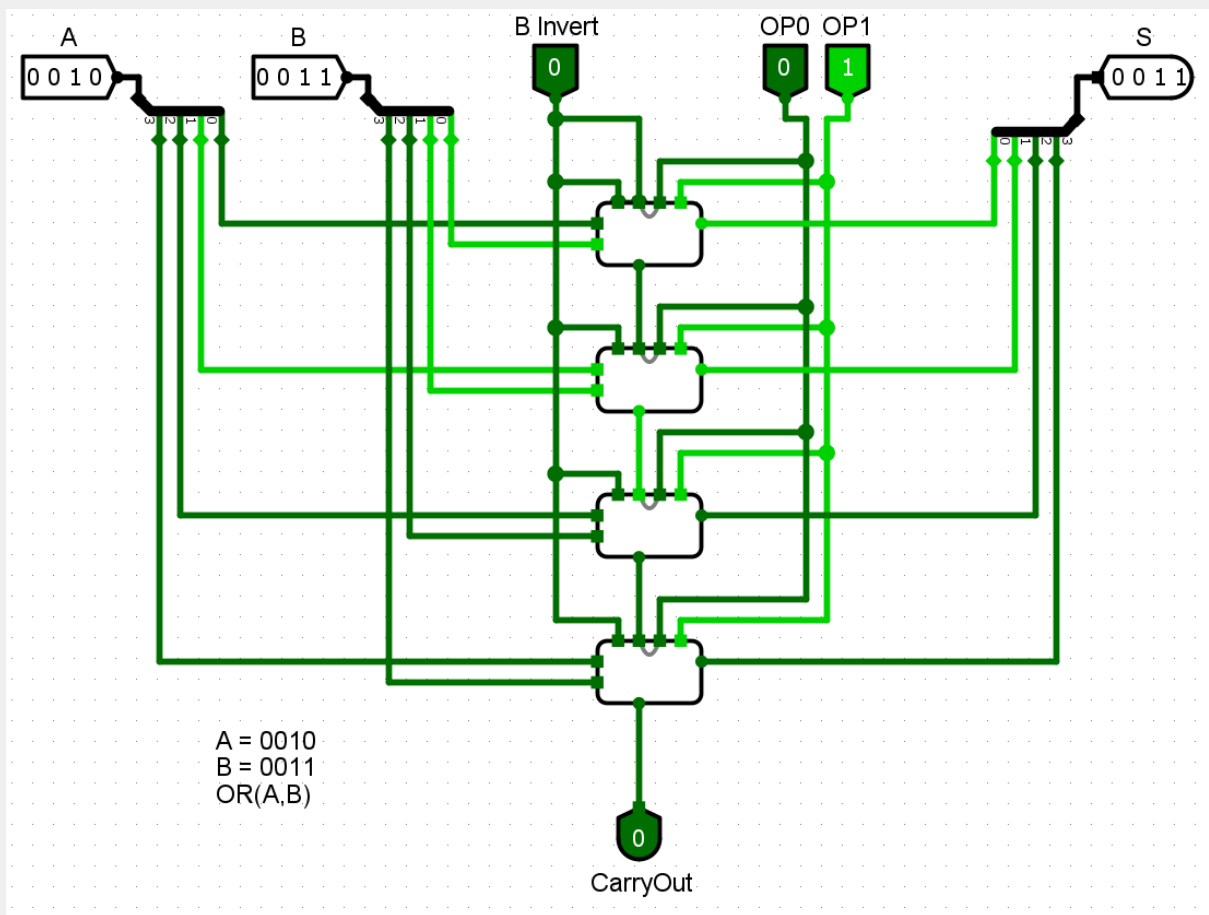


ULA 4 Bits



Testes:





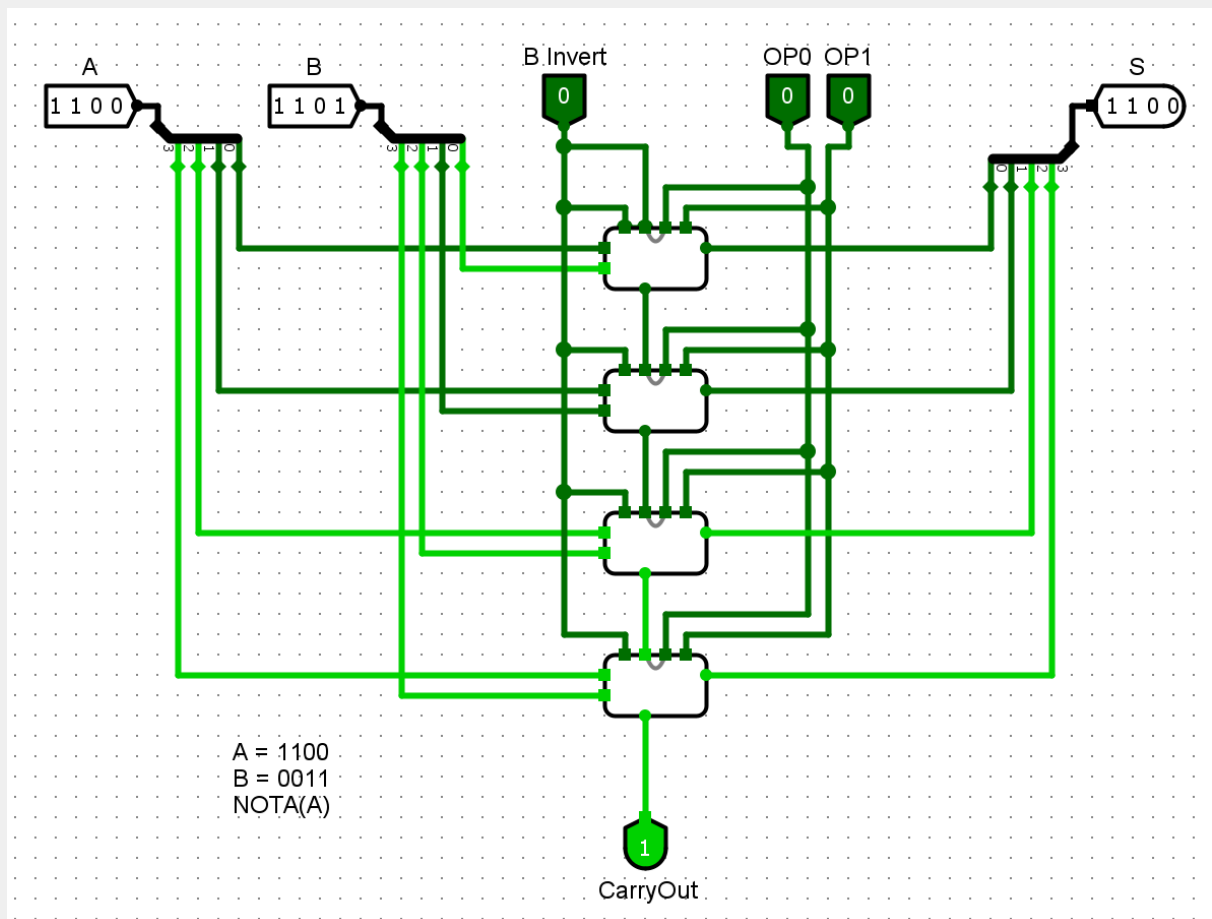
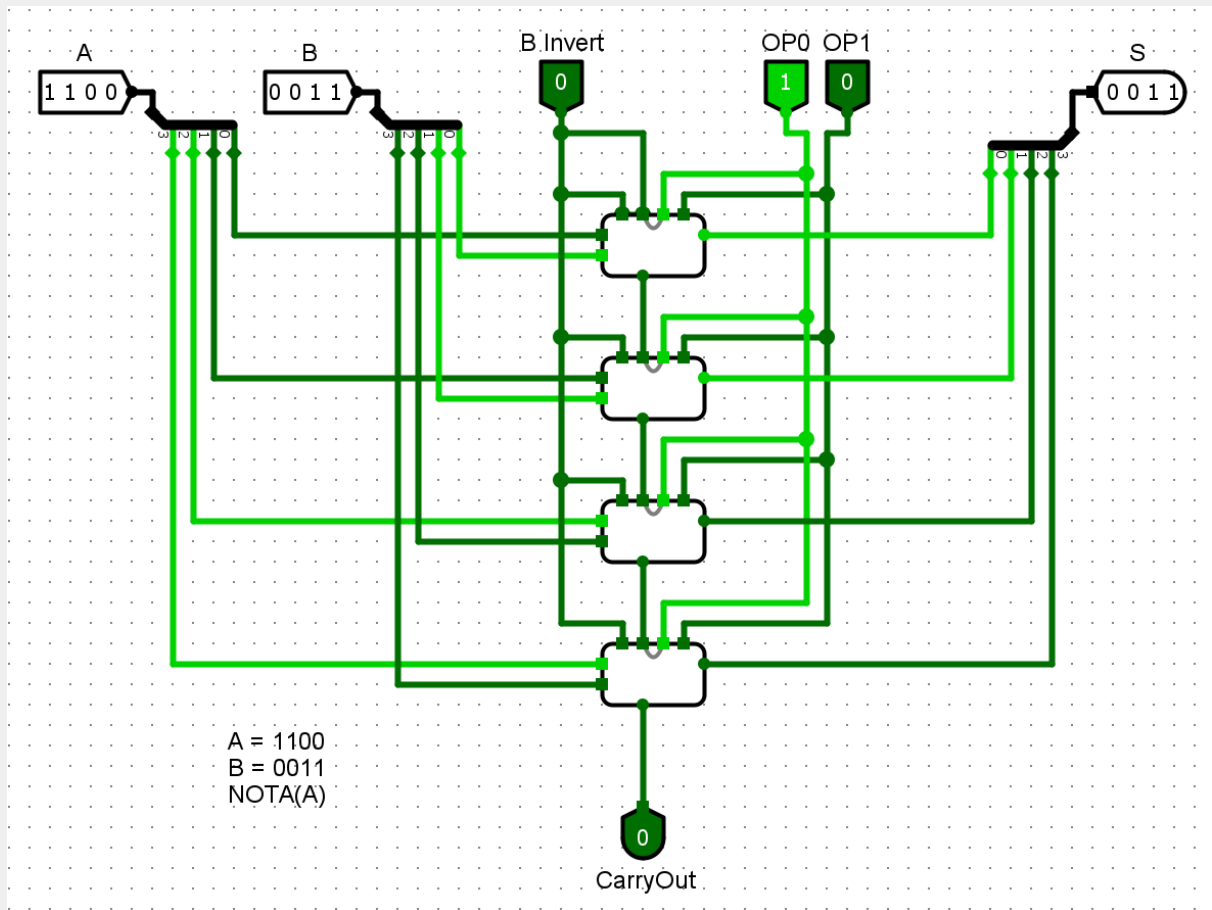


Tabela:

Instrução	Binário	Hexa	Resultado
AND(A,B)	0010 0001 00	0x084	0000
OR(A, B)	0010 0011 01	0x08D	0011
SOMA(A,B)	0010 0011 11	0x08F	0101
NOT(A)	1100 0011 10	0x30E	0011
AND(A,B)	1100 1101 00	0x334	1100

Parte 2

ULA 74LS181

Exemplo: Instrução 0x124

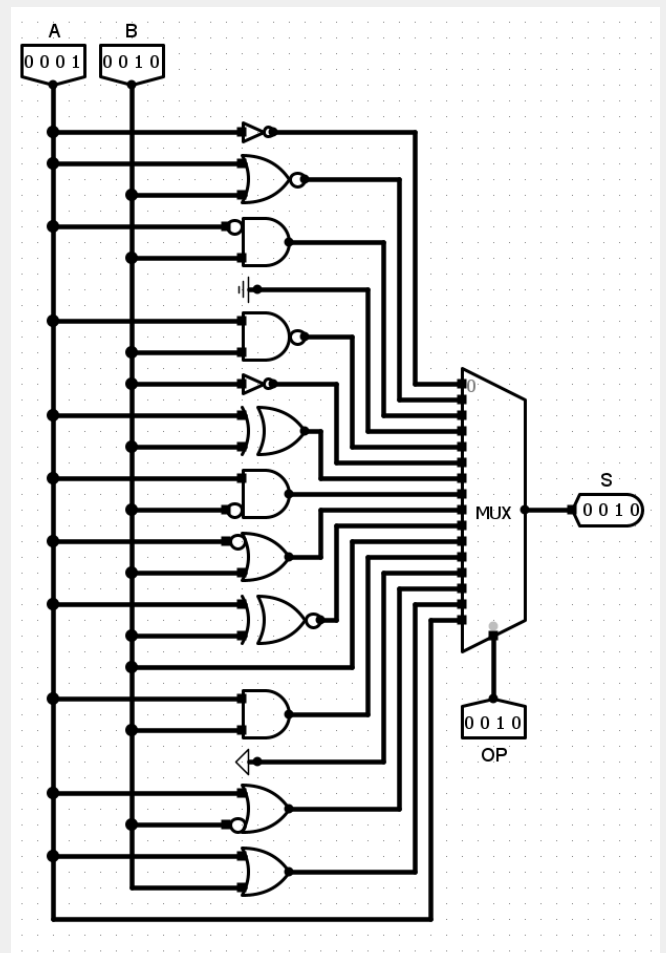
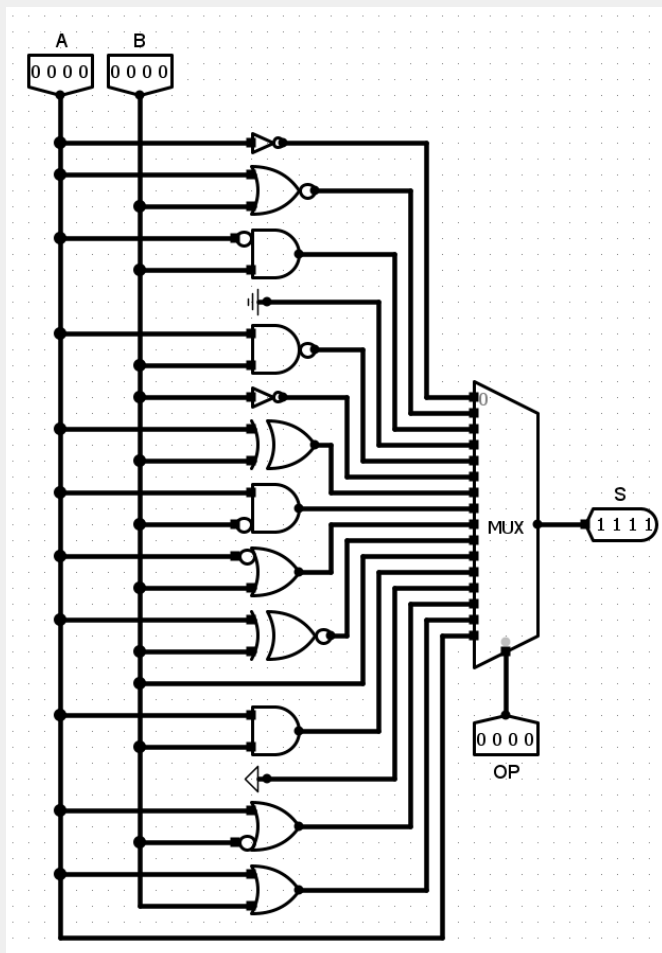


Tabela:

Instruções	Binário	Resultado
450	0100 0101 0000	1011
CB1	1100 1011 0001	0000
A32	1010 0011 0010	0001
C43	1100 0100 0011	1011
124	0001 0010 0100	0010
785	0111 1000 0101	0111
9B6	1001 1011 0110	0010
CD7	1100 1101 0111	0000
FE8	1111 1110 1000	1110
649	0110 0100 1001	1101
D9A	1101 1001 1010	1001
FCB	1111 1100 1011	1100
63C	0110 0011 1100	1111
98D	1001 1000 1101	1111
76E	0111 0110 1110	0111
23F	0010 0011 1111	0010

Pergunta: Se o objetivo fosse realmente testar esta ULA, quantas linhas a nossa tabela verdade deveria ter, ou seja na verdade a tabela que você preencheu deveria ter quantas linhas?

> A tabela verdade teria $2^{12} = 4096$ linhas no total para incluir todas as possibilidades dos 12 bits de entrada.