



**Politécnico  
Castelo Branco**  
Escola Superior  
de Tecnologia

Licenciatura em Engenharia Informática 2025/2026

# Sistemas Lógicos

Aula Prática 3 – Introdução à implementação de circuitos lógicos (Solução do Exercício)





# EXERCÍCIO

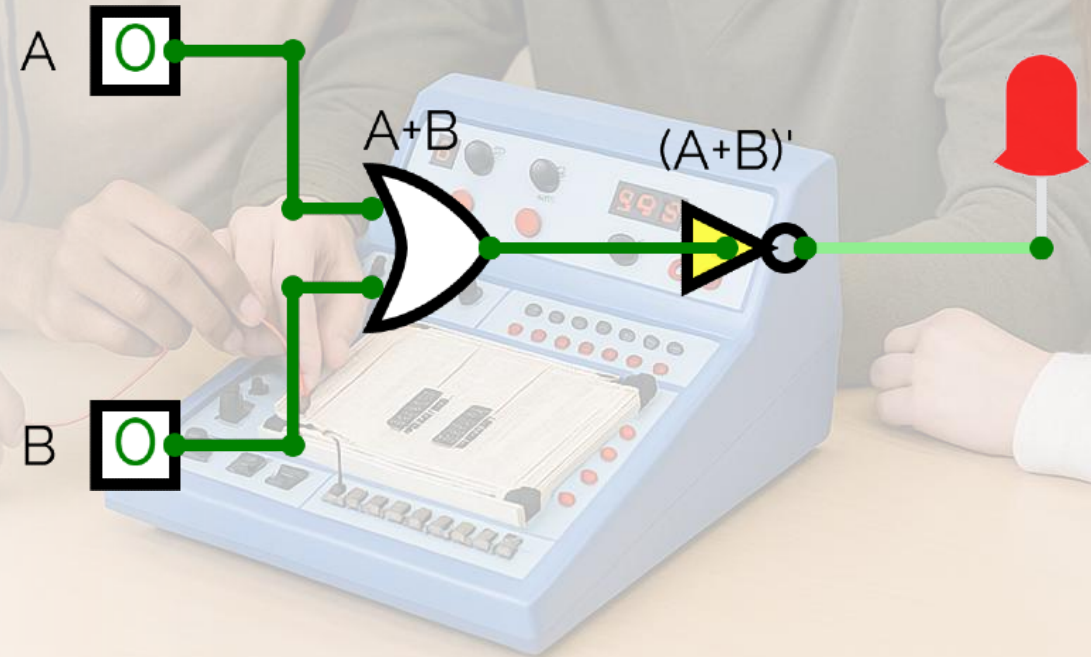
A	B	F
0	0	1
0	1	0
1	0	0

1 a) TABELA DE VERDADE

A	B	$A + B$	$\overline{A + B}$
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0	1	1	0
1	0	1	0
1	1	1	0

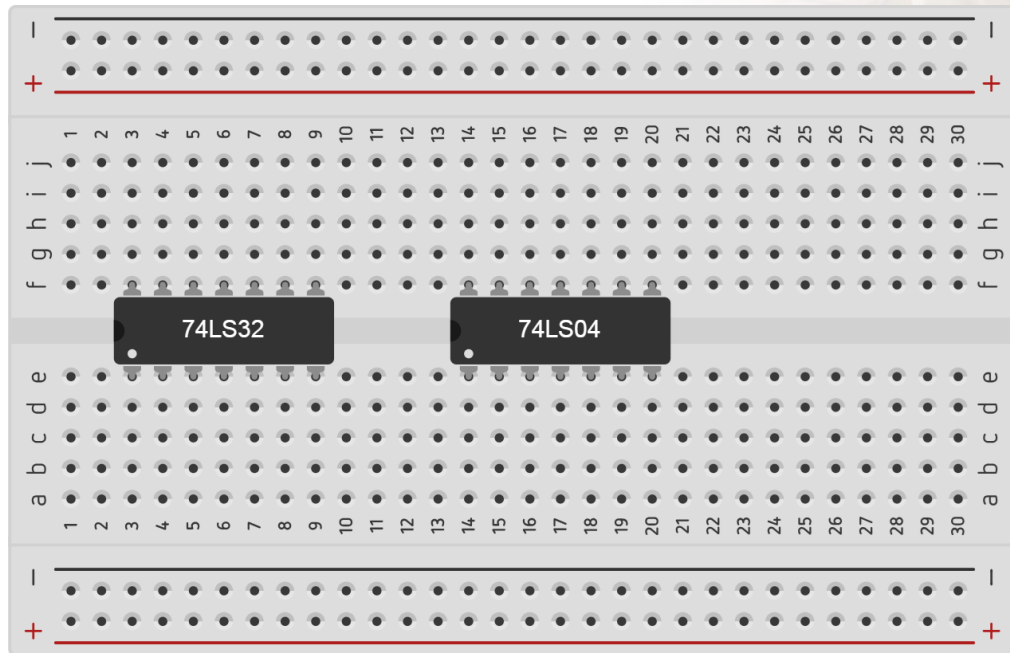


1 b) DIAGRAMA LÓGICO

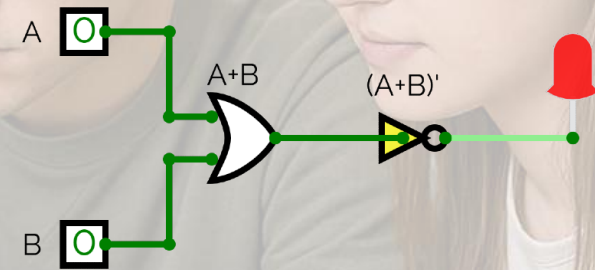




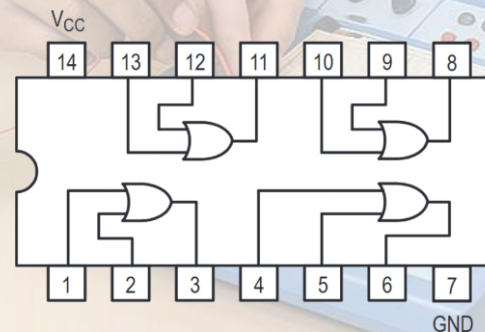
# EXERCÍCIO (IMPLEMENTAÇÃO)



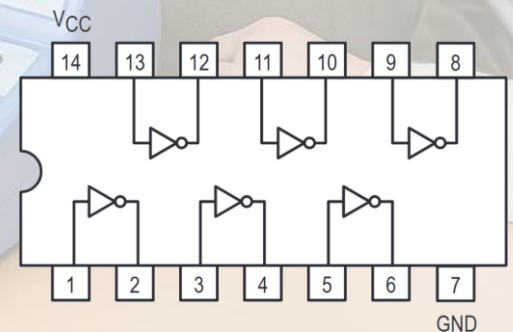
A	B	$A + B$	$\overline{A + B}$
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0



**SN74LS32**  
QUAD 2-INPUT OR GATE

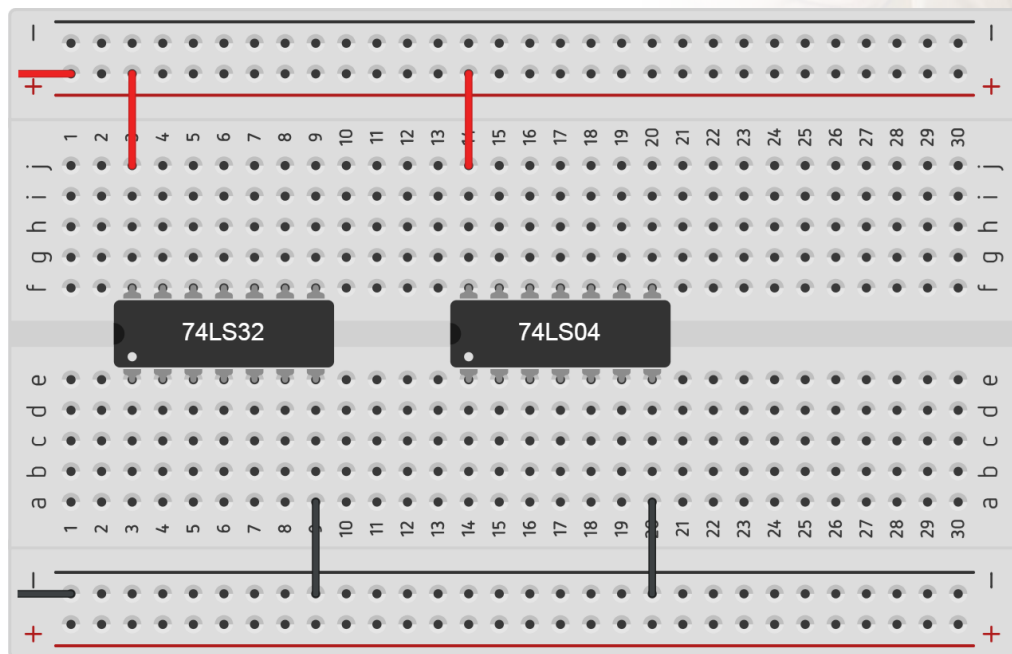


**SN74LS04**  
HEX INVERTER

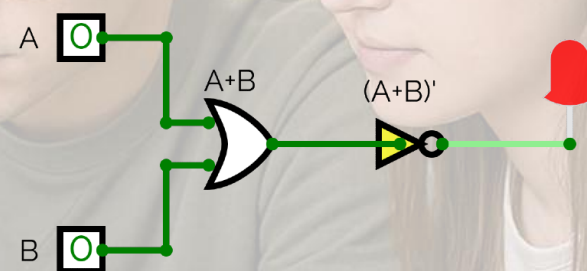




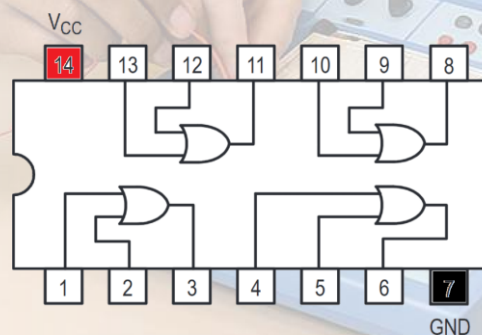
# EXERCÍCIO (IMPLEMENTAÇÃO)



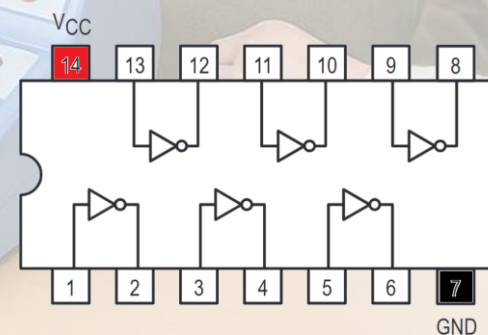
A	B	$A + B$	$\overline{A + B}$
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0	1	1	0
1	0	1	0
1	1	1	0



SN74LS32  
QUAD 2-INPUT OR GATE



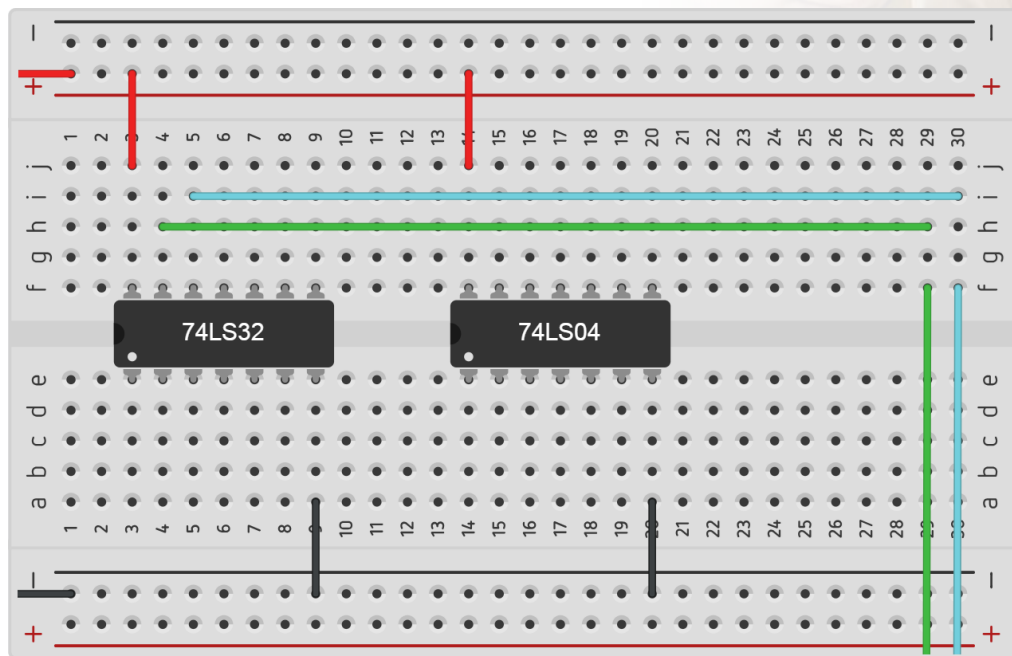
SN74LS04  
HEX INVERTER



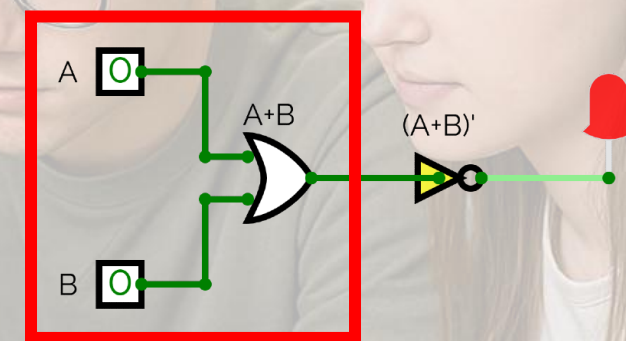




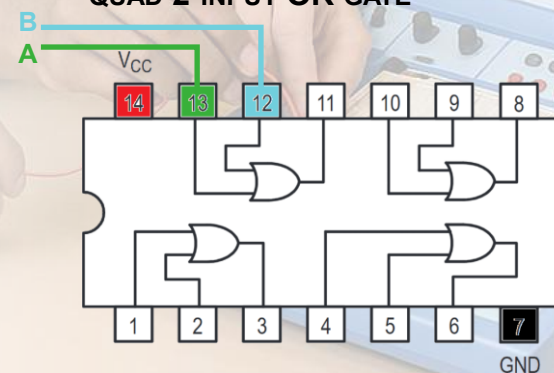
# EXERCÍCIO (IMPLEMENTAÇÃO)



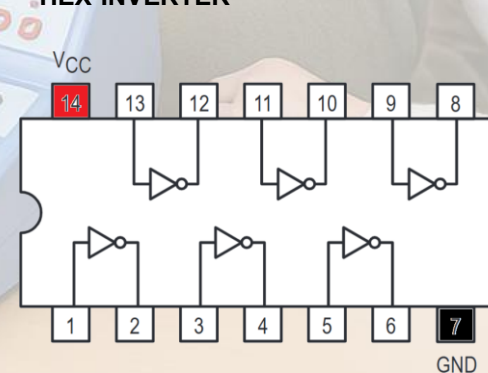
<i>A</i>	<i>B</i>	$A + B$	$\overline{A + B}$
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0



SN74LS32  
QUAD 2-INPUT OR GATE

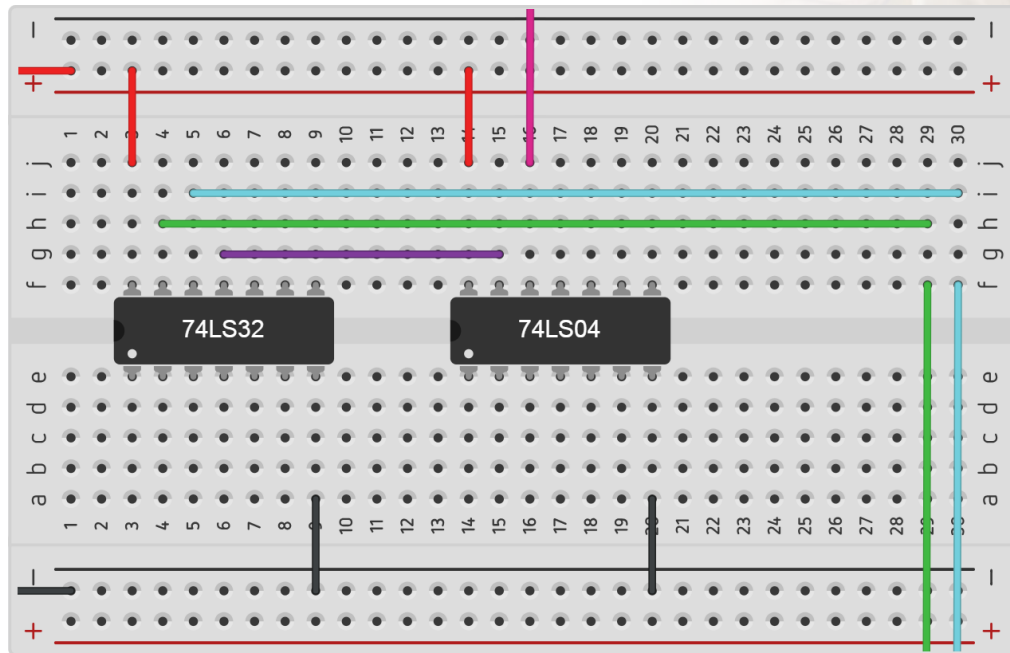


SN74LS04  
HEX INVERTER

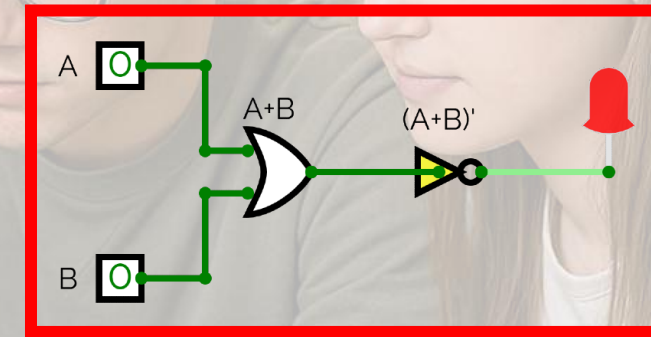




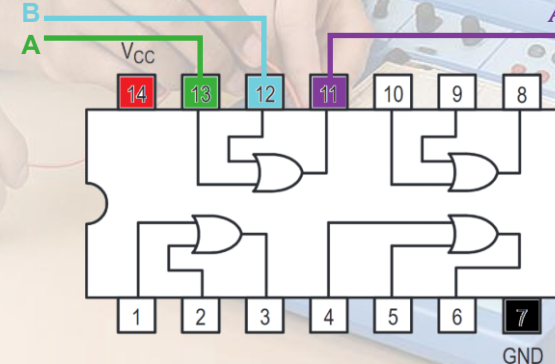
# EXERCÍCIO (IMPLEMENTAÇÃO)



A	B	$A + B$	$\overline{A + B}$
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0



SN74LS32  
QUAD 2-INPUT OR GATE



SN74LS04  
HEX INVERTER

