

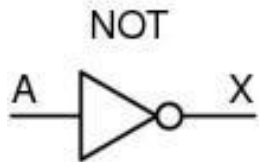


UNIVERSIDADE DO ESTADO DE MINAS GERAIS

Docente: Rildo Afonso de Almeida

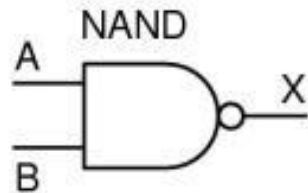
Laboratório de Circuitos Lógicos

PORTAS LÓGICAS



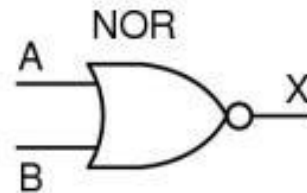
| A | X |
|---|---|
| 0 | 1 |
| 1 | 0 |

(a)



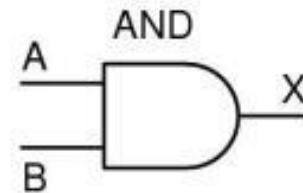
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|---|---|---|
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| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

(b)



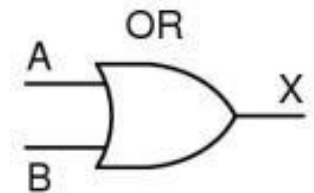
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| 1 | 0 | 0 |
| 1 | 1 | 0 |

(c)



| A | B | X |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

(d)



| A | B | X |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

(e)

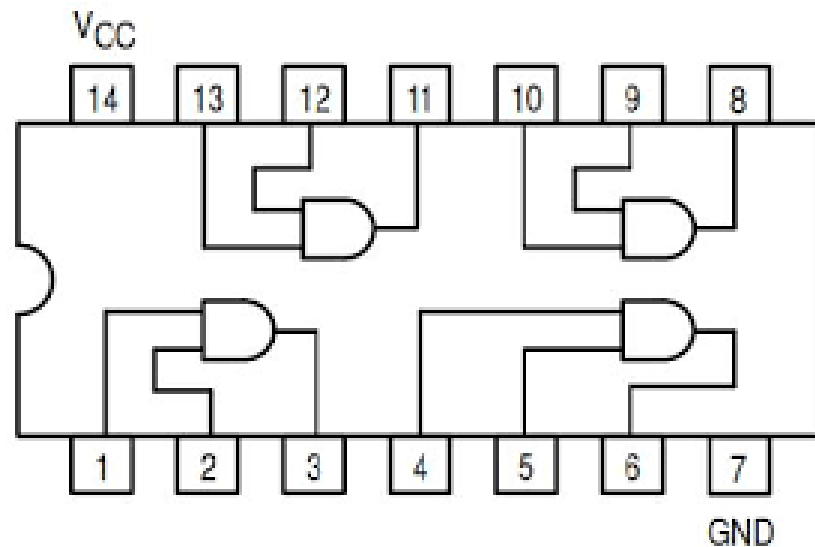
PORTAS LÓGICAS

AND



PORTAS LÓGICAS

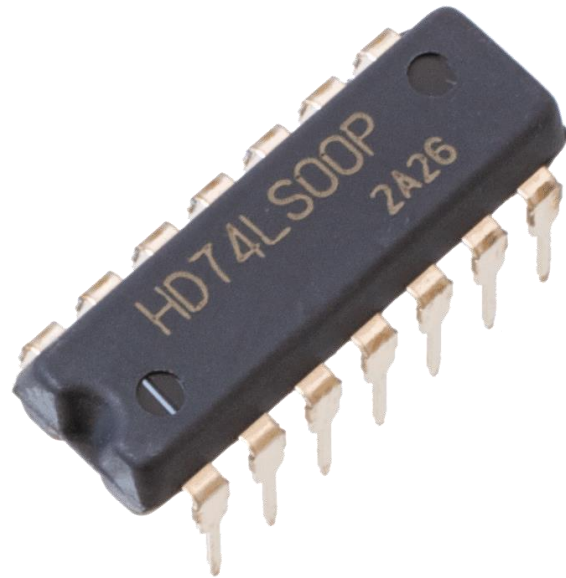
AND



| A | B | X |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

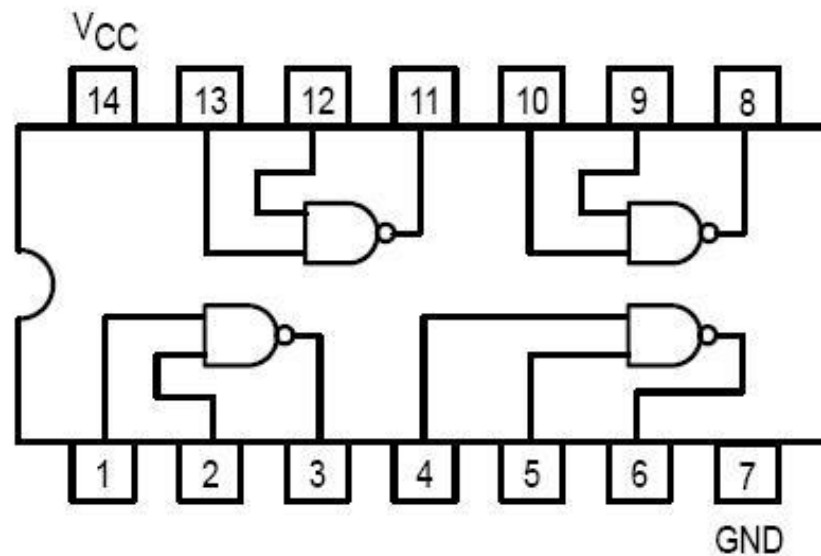
PORTAS LÓGICAS

NAND



PORTAS LÓGICAS

NAND



| A | B | X |
|---|---|---|
| 0 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

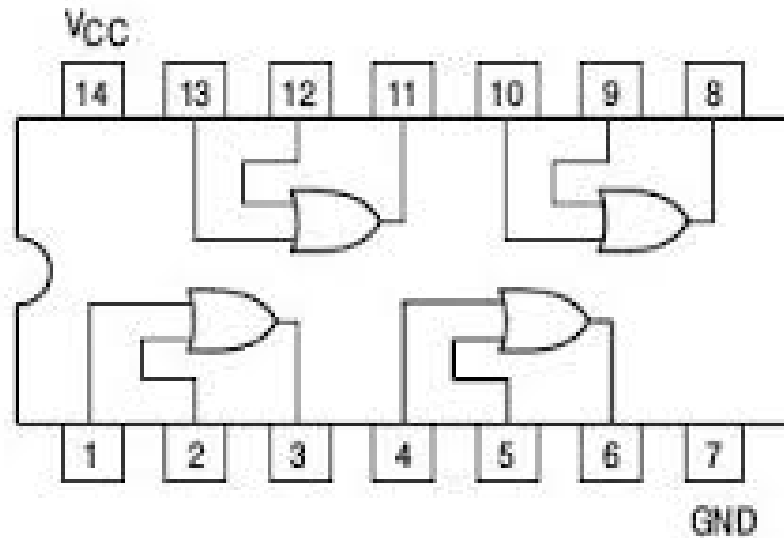
PORTAS LÓGICAS

OR



PORTAS LÓGICAS

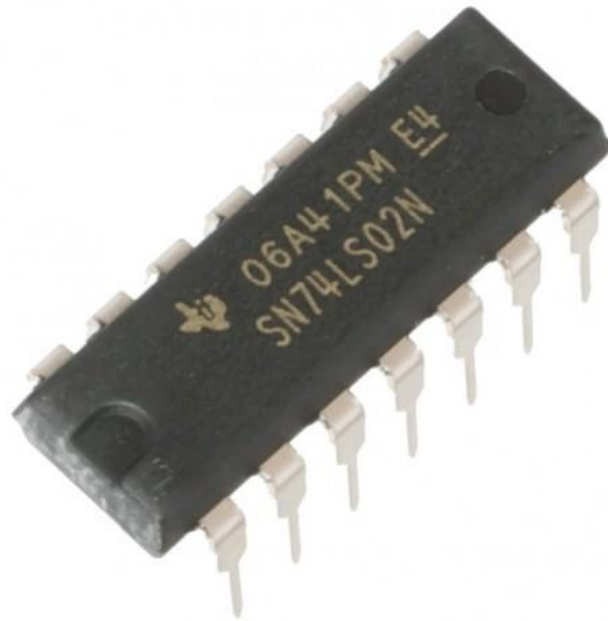
OR



| A | B | X |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 1 |

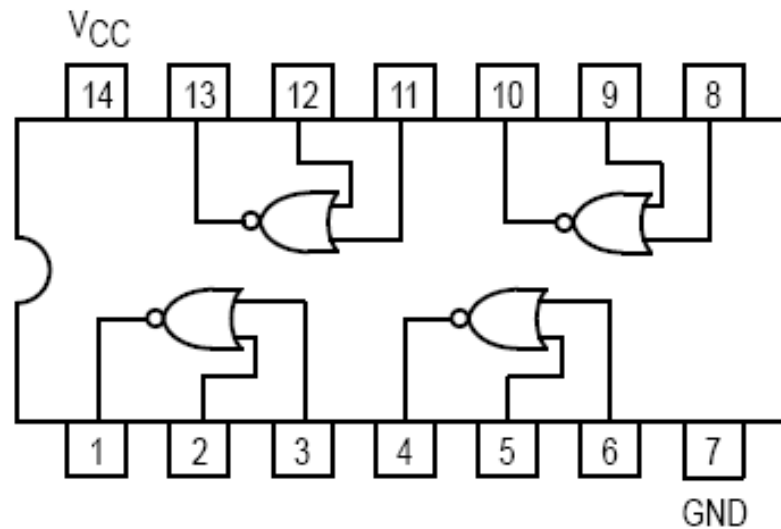
PORTAS LÓGICAS

NOR



PORTAS LÓGICAS

NOR



| A | B | X |
|---|---|---|
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 0 |

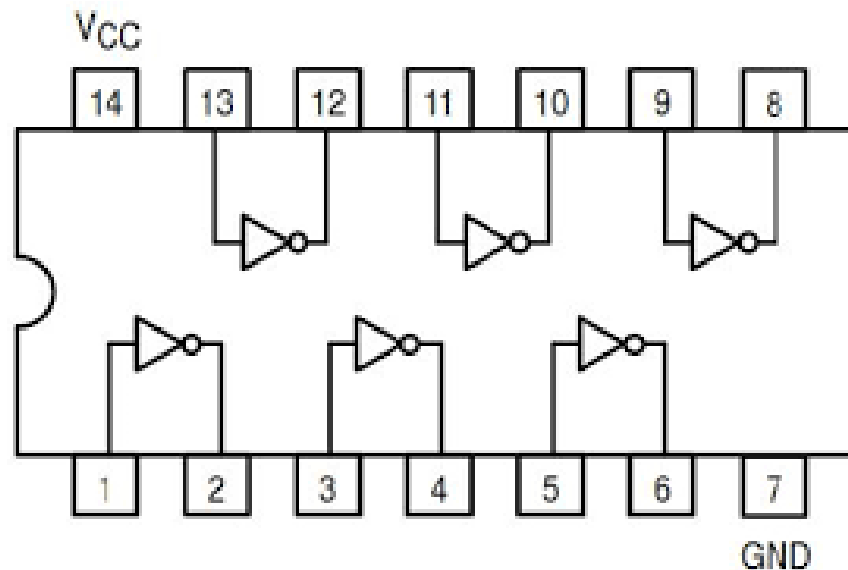
PORTAS LÓGICAS

NOT



PORTAS LÓGICAS

NOT



| A | X |
|---|---|
| 0 | 1 |
| 1 | 0 |

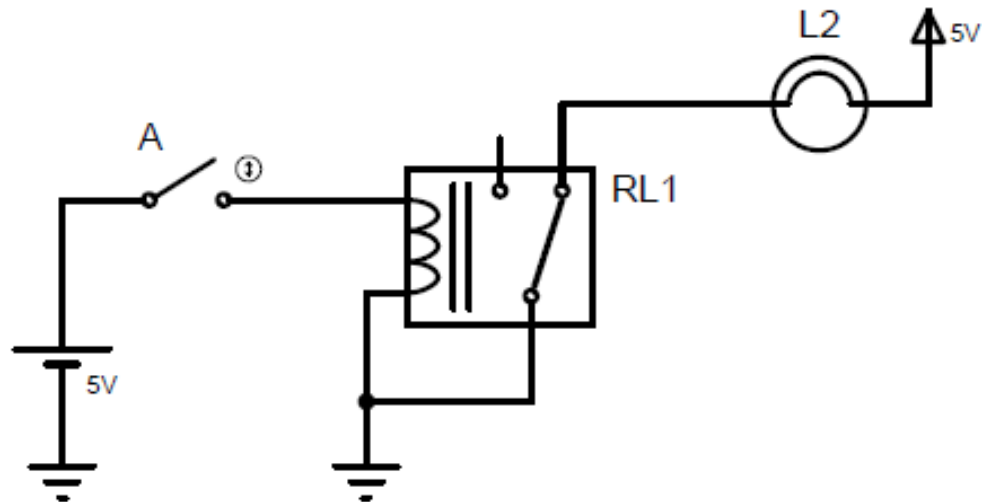


PORTAS LÓGICAS

Analogias de Portas Lógicas

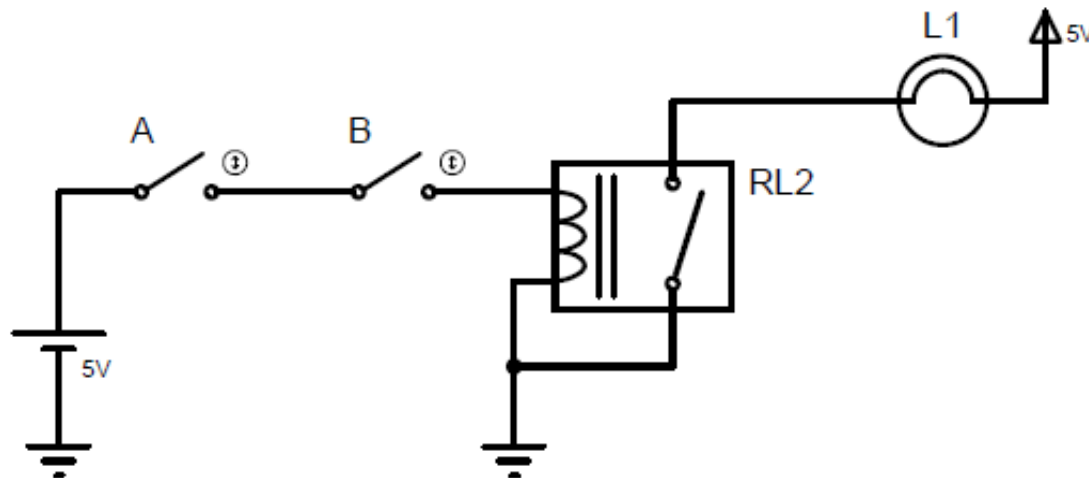
PORTAS LÓGICAS

Lógica NOT - NÃO



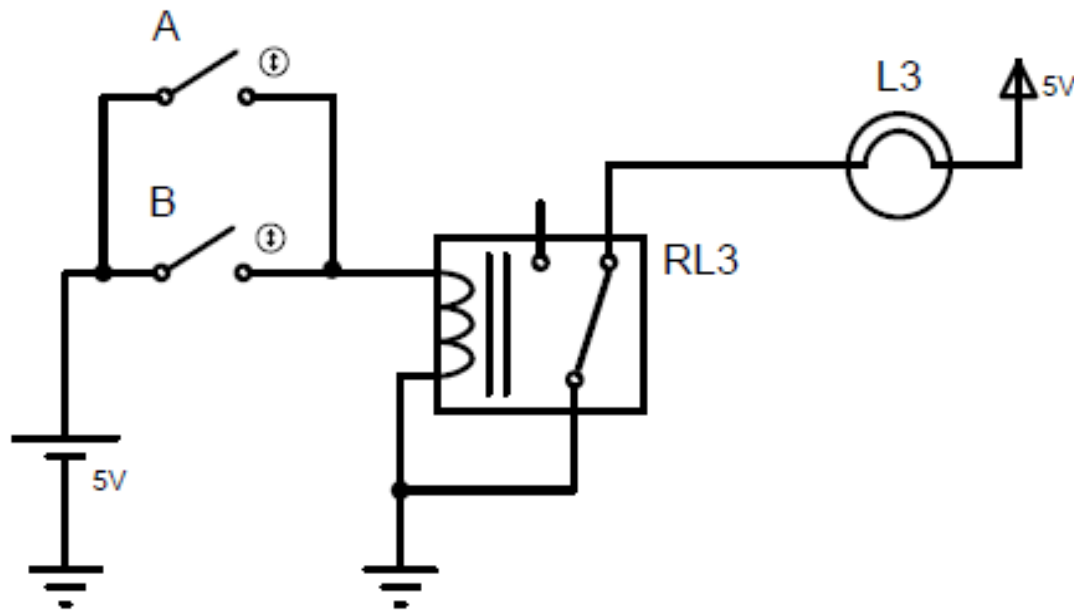
PORTAS LÓGICAS

Lógica AND - E



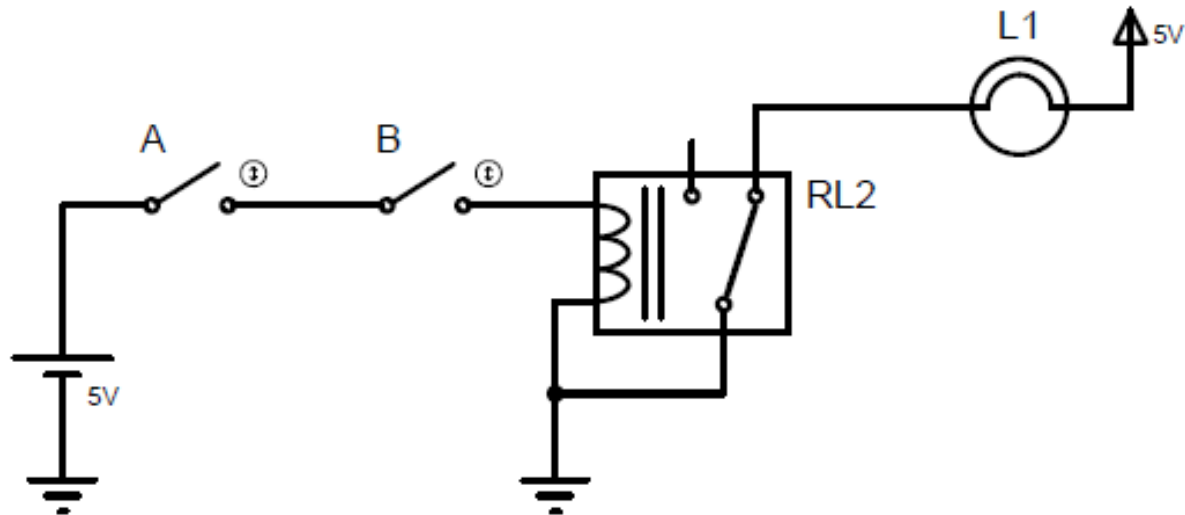
PORTAS LÓGICAS

Lógica NOR - NÃO OU



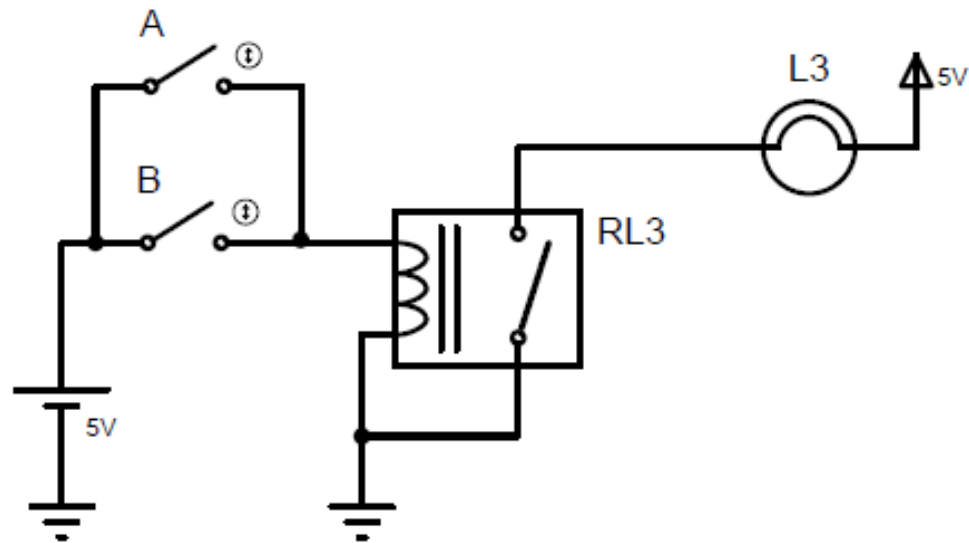
PORTAS LÓGICAS

Lógica NAND - NÃO E



PORTAS LÓGICAS

Lógica OR - OU





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