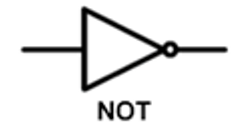
**Digital Circuits and Simulation**

**Deeds:** [**https://www.digitalelectronicsdeeds.com/downloads.html**](https://www.digitalelectronicsdeeds.com/downloads.html)

**Exercise 1 -** Fill the truth tables and simulate using DEEDS in order to verify the truth tables

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| **A** | **OUT** |
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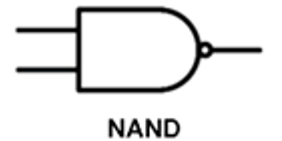
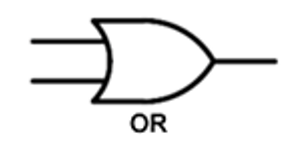
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| **A** | **B** | **OUT** |
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a)  b)Immagine che contiene piazza

Descrizione generata automaticamente

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c) d) 

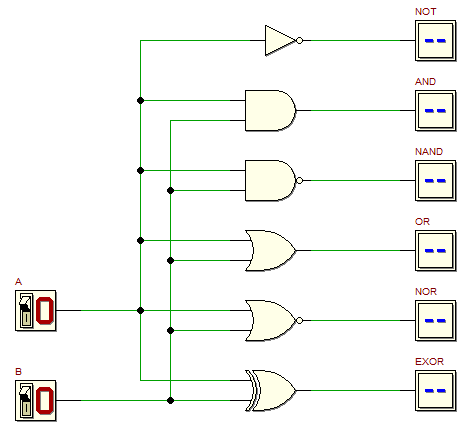
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e)Immagine che contiene testo

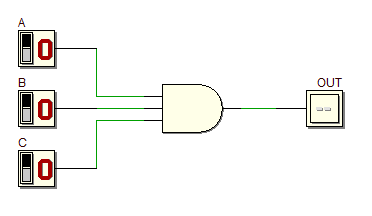
Descrizione generata automaticamente f)Immagine che contiene linea, schizzo, diagramma, bianco

Descrizione generata automaticamente



**Exercise 2** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

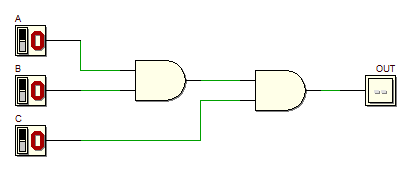
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| **A** | **B** | **C** | **OUT** |
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**Exercise 3** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

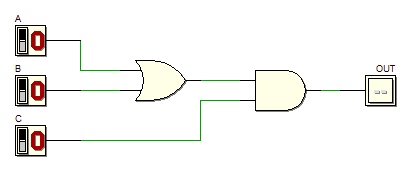
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| **A** | **B** | **C** | **OUT** |
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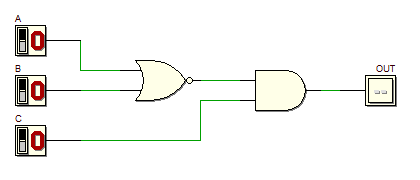
**Exercise 4** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers





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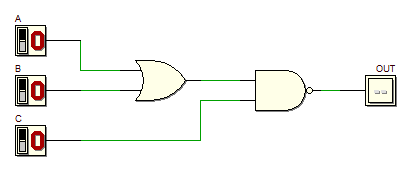
**Exercise 5** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers





**Exercise 6** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers. This is a three-input OR-AND-INVERT gate, it produces FALSE if C is TRUE and A or B is TRUE, otherwise it produces TRUE.

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**Exercise 7** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

**Immagine che contiene diagramma, linea, Diagramma, design

Descrizione generata automaticamente**

Immagine che contiene testo, schermata, diagramma, linea

Descrizione generata automaticamente

**Exercise 8** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

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Immagine che contiene diagramma, Piano, Disegno tecnico, linea

Descrizione generata automaticamente

Immagine che contiene testo, schermata, diagramma, Parallelo

Descrizione generata automaticamente

**Exercise 9** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

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**Immagine che contiene diagramma, Piano, Disegno tecnico, linea

Descrizione generata automaticamente**

Immagine che contiene testo, schermata, diagramma, Parallelo

Descrizione generata automaticamente

**Exercise 10** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

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**Immagine che contiene diagramma, Piano, Disegno tecnico, linea

Descrizione generata automaticamente**

Immagine che contiene testo, schermata, diagramma, Parallelo

Descrizione generata automaticamente

**Exercise 11** - Fill the truth table and the time diagram; then design the circuit using DEEDS to check the correctness of your answers

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| **A** | **B** | **C** | **D** | **OUT** |
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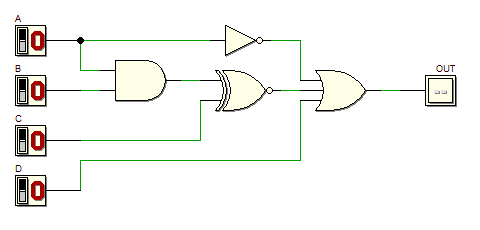
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Immagine che contiene testo, schermata, diagramma, Parallelo

Descrizione generata automaticamente