

Topalian JavaScript True AI

by

Christopher Andrew Topalian

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Topalian JavaScript True AI

file:///D:/_1Code/0_JS_Apps/Topalian_JavaScript_True_AI/Topalian_JavaScript_True_AI/Topalian_Ja

And

Both True

A	B	
0	0	= 0
0	1	= 0
1	0	= 0
1	1	= 1

if (a == 1 && b == 1)

Opposite Gate is: Nand

And	Nand
Or	Nor
Xor	Xnor
Converse Implication	Converse NonImplication
Material Implication	Material NonImplication
Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

AND

Only IF both are true

True Artificial Intelligence System

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And

0 1 0001

0

A	B	
0	0	= 0
0	1	= 0
1	0	= 0
1	1	= 1

if (a == 1 && b == 1)

Opposite Gate is: Nand

And	Nand
Or	Nor
Xor	Xnor
Converse Implication	Converse NonImplication
Material Implication	Material NonImplication
Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

AND

Only IF both are true

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AND 0001

OR 0111

XOR 0110

XNOR 1001

NAND 1110

NOR 1000

Contra-diction 0000

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Nand

01110

Both False or A True or B True

A	B	
0	0	= 1
0	1	= 1
1	0	= 1
1	1	= 0

if (a == 0 || b == 0)

Opposite Gate is: And

And	Nand
Or	Nor
Xor	Xnor
Converse Implication	Converse NonImplication
Material Implication	Material NonImplication
Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

NAND

A true both false B true

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Or

1 0 0111

One or Both True

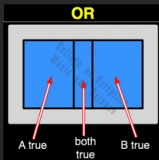
A	B	
0	0	= 0
0	1	= 1
1	0	= 1
1	1	= 1

if (a == 1 || b == 1)

Opposite Gate is: Nor

And	Nand
Or	Nor
Xor	Xnor
Converse Implication	Converse NonImplication
Material Implication	Material NonImplication
Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

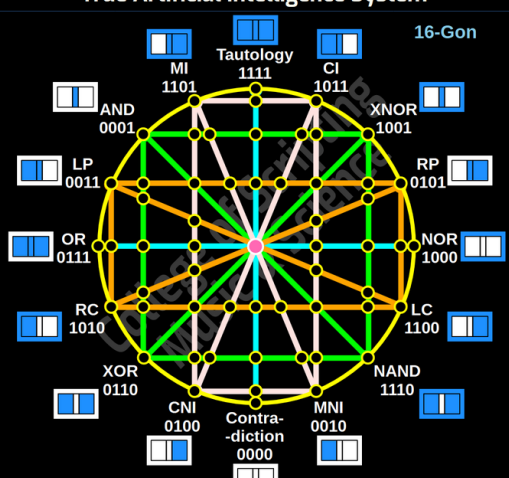
OR



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Nor

Opposite Gate is: Or

1 1 1000

0

A	B	
0	0	= 1
0	1	= 0
1	0	= 0
1	1	= 0

if (a == 0 && b == 0)

And Nand

Or Nor

Xor Xnor

Converse Implication Converse NonImplication

Material Implication Material NonImplication

Right Projection Right Complementation

Left Projection Left Complementation

Tautology Contradiction

NOR

both false

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100%

Xor

010110

A True or B True

A	B	
0	0	= 0
0	1	= 1
1	0	= 1
1	1	= 0

if ((a == 1 && b == 0) || (a == 0 && b == 1))

XOR

And

Nand

Or

Nor

Xor

Xnor

Converse Implication

Converse NonImplication

Material Implication

Material NonImplication

Right Projection

Right Complementation

Left Projection

Left Complementation

Tautology

Contradiction

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Converse Implication

Opposite Gate is: Converse NonImplication

Topalian JavaScript True AI

1 1 1011

Both False or A True or Both True

A	B	
0	0	= 1
0	1	= 0
1	0	= 1
1	1	= 1

if (a == 1 || b == 0)

And Nand
Or Nor
Xor Xnor
Converse Implication Converse NonImplication
Material Implication Material NonImplication
Right Projection Right Complementation
Left Projection Left Complementation
Tautology Contradiction

Converse Implication

A true both true both false

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Left Projection

Opposite Gate is: Left Complementation

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MI 1101

Tautology 1111

CI 1011

AND 0001

LP 0011

OR 0111

RC 1010

XOR 0110

CNI 0100

Contradiction 0000

MNI 0010

NAND 1110

LC 1100

NOR 1000

RP 0101

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And

Nand

Or

Nor

Xor

Xnor

Converse Implication

Converse NonImplication

Material Implication

Material NonImplication

Right Projection

Right Complementation

Left Projection

Left Complementation

Tautology

Contradiction

Left Projection

A true

both true

A B

0 0 = 0

0 1 = 0

1 0 = 1

1 1 = 1

if (a == 1)

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file:///D:/_1Code/0_JS_Apps/Topalian_JavaScript_True_AI/Topalian_JavaScript_True_AI/Topalian_Ja

Left Projection

0 0 0011

0

A	B	
0	0	= 0
0	1	= 0
1	0	= 1
1	1	= 1

if (a == 1)

Opposite Gate is: Left Complementation

And	Nand
Or	Nor
Xor	Xnor
Converse Implication	Converse NonImplication
Material Implication	Material NonImplication
Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

Left Projection

A true both true

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PLAYING

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100%

Xnor

001001

Both False or Both True

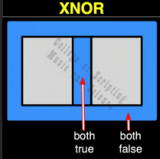
A	B	
0	0	= 1
0	1	= 0
1	0	= 0
1	1	= 1

if ((a == 0 && b == 0) || (a == 1 && b == 1))

Opposite Gate is: Xor

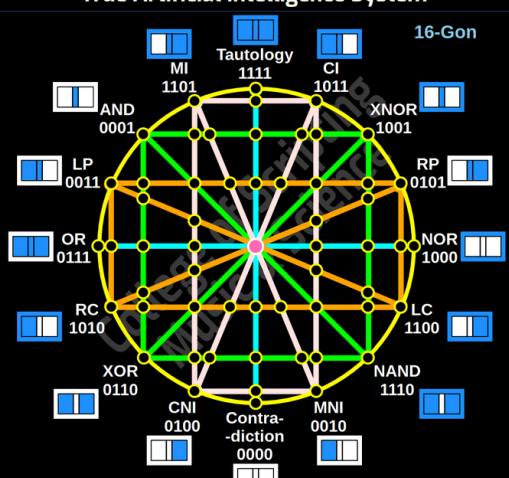
And	Nand
Or	Nor
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Converse Implication	Converse NonImplication
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Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

XNOR



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Left Complementation

0 1 1100

Both False or B True

A	B	
0	0	= 1
0	1	= 1
1	0	= 0
1	1	= 0

if (a == 0)

Opposite Gate is: Left Projection

And	Nand
Or	Nor
Xor	Xnor
Converse Implication	Converse NonImplication
Material Implication	Material NonImplication
Right Projection	Right Complementation
Left Projection	Left Complementation
Tautology	Contradiction

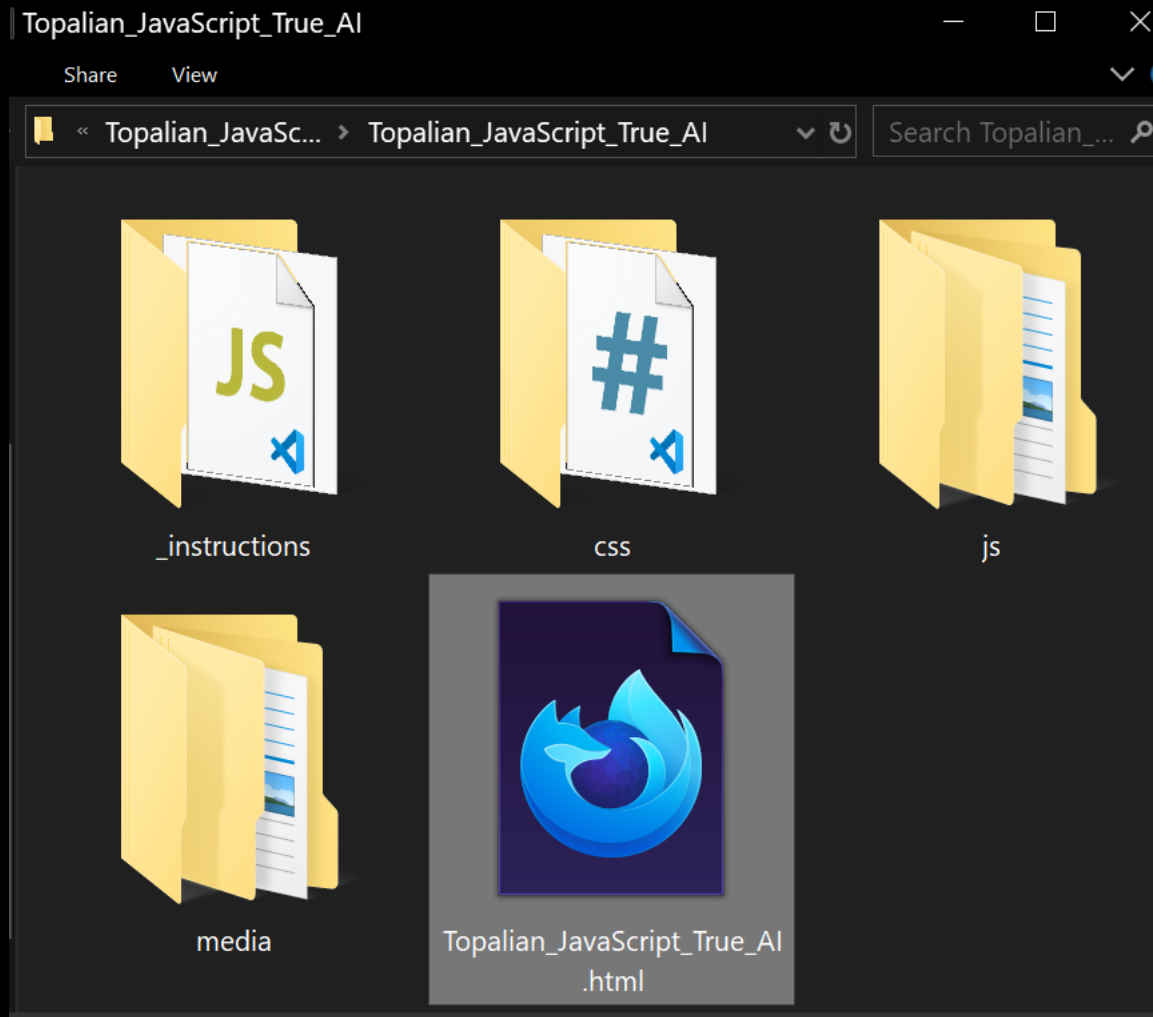
Left Complementation

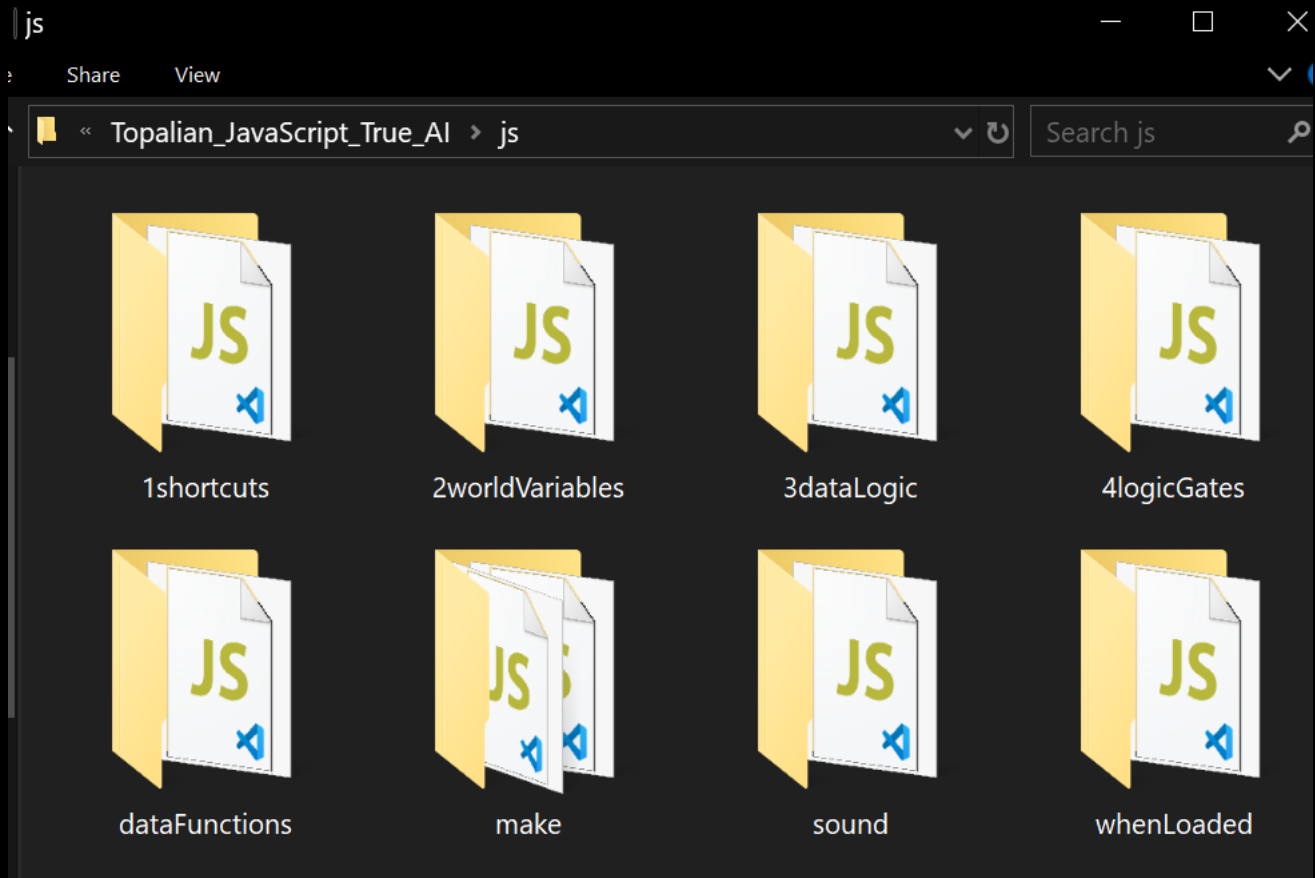
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// HowToCombineJSFiles.js

TUTORIAL:

**How to Combine all .js files in all folders that
are in our js folder.**

Getting things ready:

We should add two new lines at the end every script. This way they will combine nicely with a line break in between each script.

Step One: Open our js folder

Step Two: Type in the address bar of the js folder, cmd, press Enter

This opens our js folder in the command prompt

Step Three: Type the command shown below in the command prompt and then press Enter

for /r "%CD%" %i in (*.js) do type "%i" >> main.js

Now we have a newly created .js file named main.js that has all of our js files included into one file.

This makes it easy to upload our application and easy to find out how many lines of code our project is.

To use our main.js file, we include it in our html file code:

```
<script src = 'js/main.js'></script>
```

Happy Scripting :-)

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>**

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<!-- Topalian_JavaScript_True_AI.html -->

<!-- Version 001 - (2024-02-28) -->

<html>

<head>

```
<title> Topalian JavaScript True AI </title>
```

```
<link rel = "stylesheet" href =  
"css/style001.css">
```

```
<script src =  
'js/1shortcuts/shortcuts.js'></script>
```

```
<script src =  
'js/2worldVariables/worldVariables.js'></scrip  
t>
```

```
<script src = 'js/3dataLogic/logic.js'></script>
```

```
<script src =  
'js/dataFunctions/findIndexByName.js'></scri  
pt>
```

```
<script src =  
'js/logicGates/logicGates.js'></script>
```

```
<script src =  
'js/make/makeLogicGateButtons.js'></script>
```

```
<script src =  
'js/make/makeLogicCalculator.js'></script>
```

```
<script src =  
'js/make/makeTrueAiDiagram.js'></script>
```

```
<script src =  
'js/make/makeCredits.js'></script>
```

```
<script src =  
'js/sound/loadSounds.js'></script>
```

```
<script src =  
'js/whenLoaded/whenLoaded.js'></script>
```

```
</head>
```

```
<body onload = "whenLoaded();">
```

```
</body>
```

```
</html>
```

```
/* Dedicated to God the Father */
```

```
/* All Rights Reserved Christopher Andrew  
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```

```
/* https://github.com/ChristopherTopalian */
```

```
/*  
https://github.com/ChristopherAndrewTopalia  
n */
```

```
/* style001.css */
```

```
body  
{  
    background-color: rgb(40, 40, 40);  
    font-family: Arial;  
    font-size: 20px;
```

```
font-weight: bold;  
color: rgb(255, 255, 255);  
}
```

```
a  
{  
    color: rgb(100, 100, 100);  
    text-decoration: none;  
}
```

```
a:hover  
{  
    text-decoration: underline;  
}
```

```
input  
{  
    padding: 10px;
```



```
background-color: rgb(0, 0, 0);  
border: solid 1px rgb(100, 100, 100);  
border-radius: 8px;  
font-size: 20px;  
font-weight: bold;  
color: rgb(255, 255, 255);  
text-align: center;  
}
```

textarea

```
{  
    padding: 10px;  
    background-color: rgb(0, 0, 0);  
    border: solid 1px rgb(100, 100, 100);  
    border-radius: 8px;  
    font-family: Arial;  
    font-size: 20px;  
    font-weight: bold;
```

```
color: rgb(255, 255, 255);  
}
```

```
.logicButtonsDiv  
{  
  display: grid;  
  grid-template-columns: auto auto;  
}
```

```
.logicGateButton  
{  
  margin: 1px;  
  padding-left: 7px;  
  padding-right: 7px;  
  padding-top: 5px;  
  padding-bottom: 5px;  
  border: solid 1px rgb(100, 100, 100);  
  border-radius: 8px;
```

```
background-color: rgb(0, 0, 0);  
font-size: 14px;  
font-weight: bold;  
color: rgb(100, 100, 100);  
line-height: 12px;  
}
```

```
.logicGateButton:hover  
{  
    border-color: rgb(0, 255, 255);  
    color: rgb(255, 255, 255);  
}
```

```
.logicGateButton:active  
{  
    position: relative;  
    top: 1px;  
    border-color: rgb(100, 100, 255);
```

```
color: rgb(100, 100, 255);  
}
```

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// shortcuts.js

```
function ge(whichId)  
{  
    let result =  
    document.getElementById(whichId);
```

```
    return result;  
}
```

```
function ce(whichType)  
{  
    let result =  
document.createElement(whichType);  
  
    return result;  
}
```

```
function ba(whichElement)  
{  
    let result =  
document.body.append(whichElement);  
  
    return result;  
}
```

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// worldVariables.js

let online = false;

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// logic.js

```
let logic =  
[  
  {  
    name: "And",
```



```

    imgSrcOffline:
'media/textures/topalianDiagrams/and.png',
    imgSrcOnline:
'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/and_orig.png',
    function: "gateAnd(a, b)",
    formula: "if (a == 1 && b == 1)",
    opposite: "Nand",
    truthTable: "0001",
    truthTableFormatted: `
    A B
    0 0 = 0
    0 1 = 0
    1 0 = 0
    1 1 = 1
    `
  },

```

```

{
  name: "Nand",
  imgSrcOffline:
'media/textures/topalianDiagrams/nand.png',
  imgSrcOnline:
'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/nand_orig.png',
  function: "gateNand(a, b)",
  formula: "if (a == 0 || b == 0)",
  opposite: "And",
  truthTable: "1110",
  truthTableFormatted: `
A B
0 0 = 1
0 1 = 1
1 0 = 1
1 1 = 0
`

```

```
},
```

```
{
```

```
  name: "Or",
```

```
  imgSrcOffline:
```

```
'media/textures/topalianDiagrams/or.png',
```

```
  imgSrcOnline:
```

```
'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/or_orig.png',
```

```
  function: "gateOr(a, b)",
```

```
  formula: "if (a == 1 || b == 1)",
```

```
  opposite: "Nor",
```

```
  truthTable: "0111",
```

```
  truthTableFormatted: `
```

```
    A B
```

```
    0 0 = 0
```

```
    0 1 = 1
```

```
    1 0 = 1
```

$$1 \ 1 = 1$$

,

},

{

name: "Nor",

imgSrcOffline:

'media/textures/topalianDiagrams/nor.png',

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/nor_orig.png',

function: "gateNor(a, b)",

formula: "if (a == 0 && b == 0)",

opposite: "Or",

truthTable: "1000",

truthTableFormatted: `

A B

$$0 \ 0 = 1$$

0 1 = 0

1 0 = 0

1 1 = 0

,

},

{

name: "Xor",

imgSrcOffline:

'media/textures/topalianDiagrams/xor.png',

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/xor_orig.png',

function: "gateXor(a, b)",

formula: "if ((a == 1 && b == 0) || (a == 0 && b == 1))",

opposite: "Xnor",

truthTable: "0110",

truthTableFormatted: `

A B

0 0 = 0

0 1 = 1

1 0 = 1

1 1 = 0

`

},

{

name: "Xnor",

imgSrcOffline:

'media/textures/topalianDiagrams/xnor.png',

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/xnor_orig.png',

function: "gateXnor(a, b)",

```

    formula: "if ((a == 0 && b == 0) || (a == 1
&& b == 1))",
    opposite: "Xor",
    truthTable: "1001",
    truthTableFormatted: `
    A B
    0 0 = 1
    0 1 = 0
    1 0 = 0
    1 1 = 1
    `,
  },
  {
    name: "Converse Implication",
    imgSrcOffline:
'media/textures/topalianDiagrams/converse_i
mplication.png',

```

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/converse-implication_orig.png',

function: "gateCi(a, b)",

formula: "if (a == 1 || b == 0)",

opposite: "Converse NonImplication",

truthTable: "1011",

truthTableFormatted: `

A B

0 0 = 1

0 1 = 0

1 0 = 1

1 1 = 1

`

},

{


```

    name: "Converse NonImplication",
    imgSrcOffline:
'media/textures/topalianDiagrams/converse_n
on_implication.png',
    imgSrcOnline:
'https://collegeofscripting.weebly.com/upload
s/6/4/4/8/64482293/converse-non-
implication_orig.png',
    function: "gateCni(a, b)",
    formula: "if (a == 0 && b == 1)",
    opposite: "Converse Implication",
    truthTable: "0100",
    truthTableFormatted: `
A B
0 0 = 0
0 1 = 1
1 0 = 0
1 1 = 0

```

```
,  
{  
  name: "Material Implication",  
  imgSrcOffline:  
'media/textures/topalianDiagrams/material_im  
plication.png',  
  imgSrcOnline:  
'https://collegeofscripting.weebly.com/upload  
s/6/4/4/8/64482293/material-  
implication_orig.png',  
  function: "gateMi(a, b)",  
  formula: "if (a == 0 || b == 1)",  
  opposite: "Material NonImplication",  
  truthTable: "1101",  
  truthTableFormatted: `  
A B
```

$$0 \ 0 = 1$$

$$0 \ 1 = 1$$

$$1 \ 0 = 0$$

$$1 \ 1 = 1$$

,

},

{

name: "Material NonImplication",

imgSrcOffline:

'media/textures/topalianDiagrams/material_n
on_implication.png',

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/material-non-
implication_orig.png',

function: "gateMni(a, b)",

formula: "if (a == 1 && b == 0)",

```
opposite: "Material Implication",  
truthTable: "0010",  
truthTableFormatted: `
```

```
A B
```

```
0 0 = 0
```

```
0 1 = 0
```

```
1 0 = 1
```

```
1 1 = 0
```

```
`
```

```
},
```

```
{
```

```
  name: "Right Projection",
```

```
  imgSrcOffline:
```

```
'media/textures/topalianDiagrams/right_projection.png',
```

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/right-projection_orig.png',

function: "gateRp(a, b)",

formula: "if ((a == 0 && b == 1) || (a == 1 && b == 1))",

opposite: "Right Complementation",

truthTable: "0101",

truthTableFormatted: `

A B

0 0 = 0

0 1 = 1

1 0 = 0

1 1 = 1

`

},

{

```

name: "Right Complementation",
imgSrcOffline:
'media/textures/topalianDiagrams/right_comp
lementation.png',
imgSrcOnline:
'https://collegeofscripting.weebly.com/upload
s/6/4/4/8/64482293/right-
complementation_orig.png',
function: "gateRc(a, b)",
formula: "if ((a == 0 && b == 0) || (a == 1
&& b == 0))",
opposite: "Right Projection",
truthTable: "1010",
truthTableFormatted: `
A B
0 0 = 1
0 1 = 0
1 0 = 1

```

$$1 \ 1 = 0$$

,

},

{

name: "Left Projection",

imgSrcOffline:

'media/textures/topalianDiagrams/left_projection.png',

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/left-projection_orig.png',

function: "gateLp(a, b)",

formula: "if (a == 1)",

opposite: "Left Complementation",

truthTable: "0011",

truthTableFormatted: `

A B

$$0 \ 0 = 0$$

$$0 \ 1 = 0$$

$$1 \ 0 = 1$$

$$1 \ 1 = 1$$

,

},

{

name: "Left Complementation",

imgSrcOffline:

'media/textures/topalianDiagrams/left_complementation.png',

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/left-

complementation_orig.png',

function: "gateLc(a, b)",

formula: "if (a == 0)",


```
opposite: "Left Projection",  
truthTable: "1100",  
truthTableFormatted: `
```

```
  A  B
```

```
  0  0  =  1
```

```
  0  1  =  1
```

```
  1  0  =  0
```

```
  1  1  =  0
```

```
`
```

```
},
```

```
{
```

```
  name: "Tautology",
```

```
  imgSrcOffline:
```

```
'media/textures/topalianDiagrams/tautology.png',
```

imgSrcOnline:

'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/tautology_orig.png',

function: "gateTautology(a, b)",

formula: "if ((a == 0 && b == 0) || (a == 0 && b == 1) || (a == 1 && b == 0) || (a == 1 && b == 1))",

opposite: "Contradiction",

truthTable: "1111",

truthTableFormatted: `

A B

0 0 = 1

0 1 = 1

1 0 = 1

1 1 = 1

`

},

```

{
  name: "Contradiction",
  imgSrcOffline:
'media/textures/topalianDiagrams/contradiction.png',
  imgSrcOnline:
'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/contradiction_orig.png',
  function: "gateContradiction(a, b)",
  formula: "if ((a == 0 && b == 0) || (a == 0
&& b == 1) || (a == 1 && b == 0) || (a == 1 && b
== 1))",
  opposite: "Tautology",
  truthTable: "0000",
  truthTableFormatted: `
A B
0 0 = 0
0 1 = 0

```

1 0 = 0

1 1 = 0

,

}

];

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// logicGates.js

```
function gateAnd(a, b)  
{  
    if (a == 1 && b == 1)  
    {  
        return "Both True";
```

```
}  
else  
{  
    return 0;  
}  
}
```

```
function gateNand(a, b)
```

```
{
```

```
    /*
```

```
    if ((a == 0 && b == 0) ||  
        (a == 1 && b == 0) ||  
        (a == 0 && b == 1))
```

```
    */
```

```
    if (a == 0 || b == 0)
```

```
    {
```

```
        return "Both False or A True or B True"
```

```
}  
else  
{  
    return 0;  
}  
}
```

```
function gateOr(a, b)  
{  
    /*  
    if ((a == 1 && b == 0) ||  
        (a == 0 && b == 1) ||  
        (a == 1 && b == 1))  
    */  
  
    if (a == 1 || b == 1)  
    {  
        return "One or Both True";  
    }  
}
```

```
}  
else  
{  
    return 0;  
}  
}
```

```
function gateNor(a, b)  
{  
    if (a == 0 && b == 0)  
    {  
        return "Both False";  
    }  
    else  
    {  
        return 0;  
    }  
}
```



```
function gateXor(a, b)
{
    if ((a == 1 && b == 0) ||
        (a == 0 && b == 1))
    {
        return "A True or B True";
    }
    else
    {
        return 0;
    }
}
```

```
function gateXnor(a, b)
{
    if ((a == 0 && b == 0) ||
        (a == 1 && b == 1))
```

```
{  
    return "Both False or Both True";  
}  
else  
{  
    return 0;  
}  
}
```

```
function gateCi(a, b)  
{  
    /*  
    if ((a == 0 && b == 0) ||  
        (a == 1 && b == 0) ||  
        (a == 1 && b == 1))  
    */  
  
    if (a == 1 || b == 0)
```

```
{  
    return "Both False or A True or Both  
True";  
}  
else  
{  
    return 0;  
}  
}
```

```
function gateCni(a, b)  
{  
    if (a == 0 && b == 1)  
    {  
        return "B True";  
    }  
    else  
    {
```

```
    return 0;  
}  
}
```

```
function gateMi(a, b)  
{  
    /*  
    if ((a == 0 && b == 0) ||  
        (a == 0 && b == 1) ||  
        (a == 1 && b == 1))  
    */  
  
    if (a == 0 || b == 1)  
    {  
        return "Both False or B True or Both  
True";  
    }  
    else
```

```
{  
    return 0;  
}  
}
```

```
function gateMni(a, b)  
{  
    if (a == 1 && b == 0)  
    {  
        return "A True";  
    }  
    else  
    {  
        return 0;  
    }  
}
```

```
function gateRp(a, b)
```

```
{  
    if ((a == 0 && b == 1) ||  
        (a == 1 && b == 1))  
    {  
        return "B True or Both True";  
    }  
    else  
    {  
        return 0;  
    }  
}
```

```
function gateRc(a, b)  
{  
    if ((a == 0 && b == 0) ||  
        (a == 1 && b == 0))  
    {  
        return "Both False or A True";  
    }  
}
```

```
}  
else  
{  
    return 0;  
}  
}
```

```
function gateLp(a, b)  
{  
    /*  
    if ((a == 1 && b == 0) ||  
        (a == 1 && b == 1))  
    */  
  
    if (a == 1)  
    {  
        return "A True or Both True";  
    }  
}
```

```
else
{
    return 0;
}
}

function gateLc(a, b)
{
    /*
    if ((a == 0 && b == 0) ||
        (a == 0 && b == 1))
    */

    if (a == 0)
    {
        return "Both False or B True";
    }
    else
```



```
{  
    return 0;  
}  
}
```

```
function gateTautology(a, b)  
{  
    if ((a == 0 && b == 0) ||  
        (a == 0 && b == 1) ||  
        (a == 1 && b == 0) ||  
        (a == 1 && b == 1))  
    {  
        return "One or Both False or True";  
    }  
    else  
    {  
        return 0;  
    }  
}
```

```
}
```

```
function gateContradiction(a, b)
```

```
{
```

```
    if ((a == 0 && b == 0) ||  
        (a == 0 && b == 1) ||  
        (a == 1 && b == 0) ||  
        (a == 1 && b == 1))
```

```
    {
```

```
        return "One or Both False or True.
```

```
Negative Message is placed here, or we can  
leave it blank";
```

```
    }
```

```
    else
```

```
    {
```

```
        return 0;
```

```
    }
```

```
}
```

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// findIndexByName.js

```
function findIndexByName(whichArray,  
whichName)  
{  
    let index =  
    whichArray.findIndex(function(a)
```

```
{  
    return a.name === whichName  
});  
  
return index;  
}
```

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// makeCredits.js

```
function makeCredits()  
{  
    let creditsDiv =  
document.createElement('div');  
    creditsDiv.style.position = 'absolute';
```

```
creditsDiv.style.right = '10px';  
creditsDiv.style.top = '5px';  
creditsDiv.style.zIndex = 1;  
ba(creditsDiv);
```

```
//-//
```

```
let titleDiv =  
document.createElement('div');  
titleDiv.innerHTML =  
`<a href =  
'https://github.com/christophertopalian'  
target = '_blank'>Topalian JavaScript True  
AI</a>`;  
titleDiv.style.fontSize = '15px';  
titleDiv.style.color = 'rgb(120, 120, 120)';  
creditsDiv.append(titleDiv);  
}
```

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// makeLogicCalculator.js

```
function makeLogicCalculator(whichItem)  
{  
  if (ge("logicCalcDiv"))  
  {  
    ge("logicCalcDiv").remove();
```

```
}
```

```
//-//
```

```
let logicCalcDiv = ce("div");  
logicCalcDiv.id = "logicCalcDiv";  
logicCalcDiv.className = "logicCalcDiv";  
logicCalcDiv.style.position = 'absolute';  
logicCalcDiv.style.left = '10px';  
logicCalcDiv.style.top = '5px';  
logicCalcDiv.style.display = 'flex';  
logicCalcDiv.style.flexDirection = 'column';  
ba(logicCalcDiv);
```

```
//-//
```

```
let logicGateTitle = ce("div");
```



```
    logicGateTitle.innerHTML =  
logic[findIndexByName(logic,  
whichItem)].name;  
    logicGateTitle.id = "logicGateTitle";  
    logicGateTitle.style.position = 'relative';  
    logicGateTitle.style.left = '3.5px';  
    logicGateTitle.style.top = '-1.5px';  
    logicGateTitle.style.color = 'rgb(0, 255,  
255)';  
    logicCalcDiv.append(logicGateTitle);  
  
//-//
```

```
let textboxDiv = ce('div');  
textboxDiv.id = 'textboxDiv';  
textboxDiv.style.display = 'flex';  
textboxDiv.style.flexDirection = 'row';  
logicCalcDiv.append(textboxDiv);
```

```
//-//
```

```
let textBox001 = ce("input");
textBox001.type = 'text';
textBox001.id = "textBox001";
textBox001.placeholder = "A";
textBox001.style.width = '50px';
textBox001.style.marginRight = '3px';
textBox001.onkeyup = function()
{
    let a = textBox001.value;
    let b = textBox002.value;

    if (b != "")
    {
```

```
        ge("textBoxResult").value =  
eval(logic[findIndexByName(logic,  
whichItem)].function);  
    }  
};  
textBoxDiv.append(textBox001);  
  
//-//
```

```
let textBox002 = ce("input");  
textBox002.type = 'text';  
textBox002.id = "textBox002";  
textBox002.placeholder = "B";  
textBox002.style.width = '50px';  
textBox002.onkeyup = function()  
{  
    let a = textBox001.value;  
    let b = textBox002.value;
```

```
if (a != " && b != ")
{
    ge("textBoxResult").value =
eval(logic[findIndexByName(logic,
whichItem)].function);
}
else
{
    ge("textBoxResult").value = "
}
};
textboxDiv.append(textBox002);

//-//
```

```
let textBoxResult = ce("textarea");
textBoxResult.id = "textBoxResult";
```

```
textBoxResult.placeholder = "Result";
textBoxResult.style.width = '200px';
textBoxResult.onchange = function()
{
    if (ge('textBoxResult').value == 0)
    {
        ge('textBoxResult').style.borderColor
= 'rgb(255, 255, 255)';
    }
    else
    {
        ge('textBoxResult').style.borderColor
= 'rgb(0, 255, 255)';
    }
}
logicCalcDiv.append(textBoxResult);

//-//
```

```
let truthTableAbbreviated = ce('div');
truthTableAbbreviated.innerHTML =
logic[findIndexByName(logic,
whichItem)].truthTable;
truthTableAbbreviated.id =
'truthTableAbbreviated';
truthTableAbbreviated.style.position =
'absolute';
truthTableAbbreviated.style.left = '140px'
truthTableAbbreviated.style.top = '40px';
truthTableAbbreviated.style.color =
'rgb(150, 150, 150)';
if (ge('truthTableAbbreviated'))
{
    ge('truthTableAbbreviated').remove();
}
ba(truthTableAbbreviated);
```

```
//-//
```

```
let truthTableComplete = ce('div');
truthTableComplete.innerHTML = '<pre>' +
logic[findIndexByName(logic,
whichItem)].truthTableFormatted + '</pre>';
truthTableComplete.id =
'truthTableComplete';
truthTableComplete.style.position =
'absolute';
truthTableComplete.style.left = '-30px'
truthTableComplete.style.top = '151px';
truthTableComplete.style.color = 'rgb(150,
150, 150)';
if (ge('truthTableComplete'))
{
    ge('truthTableComplete').remove();
}
```

```
}  
ba(truthTableComplete);
```

```
//-//
```

```
let booleanLogicGate = ce('div');  
booleanLogicGate.innerHTML =  
logic[findIndexByName(logic,  
whichItem)].formula;  
booleanLogicGate.id = 'booleanLogicGate';  
booleanLogicGate.style.position =  
'absolute';  
booleanLogicGate.style.left = '25px'  
booleanLogicGate.style.top = '310px';  
booleanLogicGate.style.width = '400px';  
booleanLogicGate.style.color = 'rgb(0, 255,  
255)';  
if (ge('booleanLogicGate'))
```



```
{  
    ge('booleanLogicGate').remove();  
}  
ba(booleanLogicGate);
```

```
//-//
```

```
let oppositeGate = ce('div');  
oppositeGate.innerHTML = 'Opposite Gate  
is: ' + logic[findIndexByName(logic,  
whichItem)].opposite;  
oppositeGate.id = 'oppositeGate';  
oppositeGate.style.position = 'absolute';  
oppositeGate.style.left = '280px'  
oppositeGate.style.top = '3px';  
oppositeGate.style.color = 'rgb(100, 100,  
100)';  
if (ge('oppositeGate'))
```

```
{  
    ge('oppositeGate').remove();  
}  
ba(oppositeGate);
```

```
//-//
```

```
let topalianDiagram = ce('img');  
topalianDiagram.id = 'topalianDiagram';  
if (online == false)  
{  
    topalianDiagram.src =  
logic[findIndexByName(logic,  
whichItem)].imgSrcOffline;  
}  
else  
{
```

```
    topalianDiagram.src =  
logic[findIndexByName(logic,  
whichItem)].imgSrcOnline;  
}  
topalianDiagram.style.position = 'absolute';  
topalianDiagram.style.left = '458px';  
topalianDiagram.style.top = '283px';  
topalianDiagram.style.width = '115px';  
ba(topalianDiagram);  
}
```

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// makeLogicGateButtons.js

```
function makeLogicGateButtons()  
{  
    let logicButtonsDiv = ce("div");  
    logicButtonsDiv.id = "logicButtonsDiv";
```

```
logicButtonsDiv.className =  
"logicButtonsDiv";  
logicButtonsDiv.style.position = 'absolute';  
logicButtonsDiv.style.left = '217px';  
logicButtonsDiv.style.top = '40px';  
logicButtonsDiv.style.width = '375px';  
ba(logicButtonsDiv);  
  
//-//  
  
for (let x = 0; x < logic.length; x++)  
{  
    let logicGateButton = ce("button");  
    logicGateButton.innerHTML =  
logic[x].name;  
    logicGateButton.id = "logicGateButton"  
+ logic[x].name;
```

```
logicGateButton.className =  
"logicGateButton";
```

```
logicGateButton.onclick = function()  
{  
    ge('sfx_blip_001').play();  
    makeLogicCalculator(logic[x].name);  
};
```

```
logicGateButton.onmouseover =  
function()  
{  
    ge('sfx_warp_001').play();  
};
```

```
logicButtonsDiv.append(logicGateButton);  
}  
}
```

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// makeTrueAiDiagram.js

```
function makeTrueAiDiagram()  
{  
  let trueAiDiagram = ce('img');  
  trueAiDiagram.id = 'trueAiDiagram';  
  if (online == false)
```

```
{  
    trueAiDiagram.src =  
'media/textures/true_ai_by_christopher_topal  
ian.png';  
}  
else  
{  
    trueAiDiagram.src =  
'https://collegeofscripting.weebly.com/upload  
s/6/4/4/8/64482293/true-ai-by-christopher-  
topalian_orig.png';  
}  
trueAiDiagram.style.position = 'absolute';  
trueAiDiagram.style.left = '598px';  
trueAiDiagram.style.top = '40px';  
trueAiDiagram.style.width = '400px';  
ba(trueAiDiagram);  
}
```


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// loadSounds.js

```
function loadSounds()  
{  
    let sounds =  
    [  
        {
```

```
    name: 'sfx_blip_001',  
    soundFileOffline:  
'media/sounds/sfx_blip_001.mp4',  
    soundFileOnline:  
'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/sfx_blip_001.mp4'  
  },  
  
  {  
    name: 'sfx_warp_001',  
    soundFileOffline:  
'media/sounds/sfx_warp_001.mp4',  
    soundFileOnline:  
'https://collegeofscripting.weebly.com/uploads/6/4/4/8/64482293/sfx_warp_001.mp4'  
  }  
];
```

```
for (let x = 0; x < sounds.length; x++)  
{  
    let theSound = ce('audio');  
    if (online == false)  
    {  
        theSound.src =  
sounds[x].soundFileOffline;  
    }  
    else  
    {  
        theSound.src =  
sounds[x].soundFileOnline;  
    }  
    theSound.id = sounds[x].name;  
    theSound.loop = false;  
    theSound.volume = 1.0;  
    ba(theSound);  
}
```



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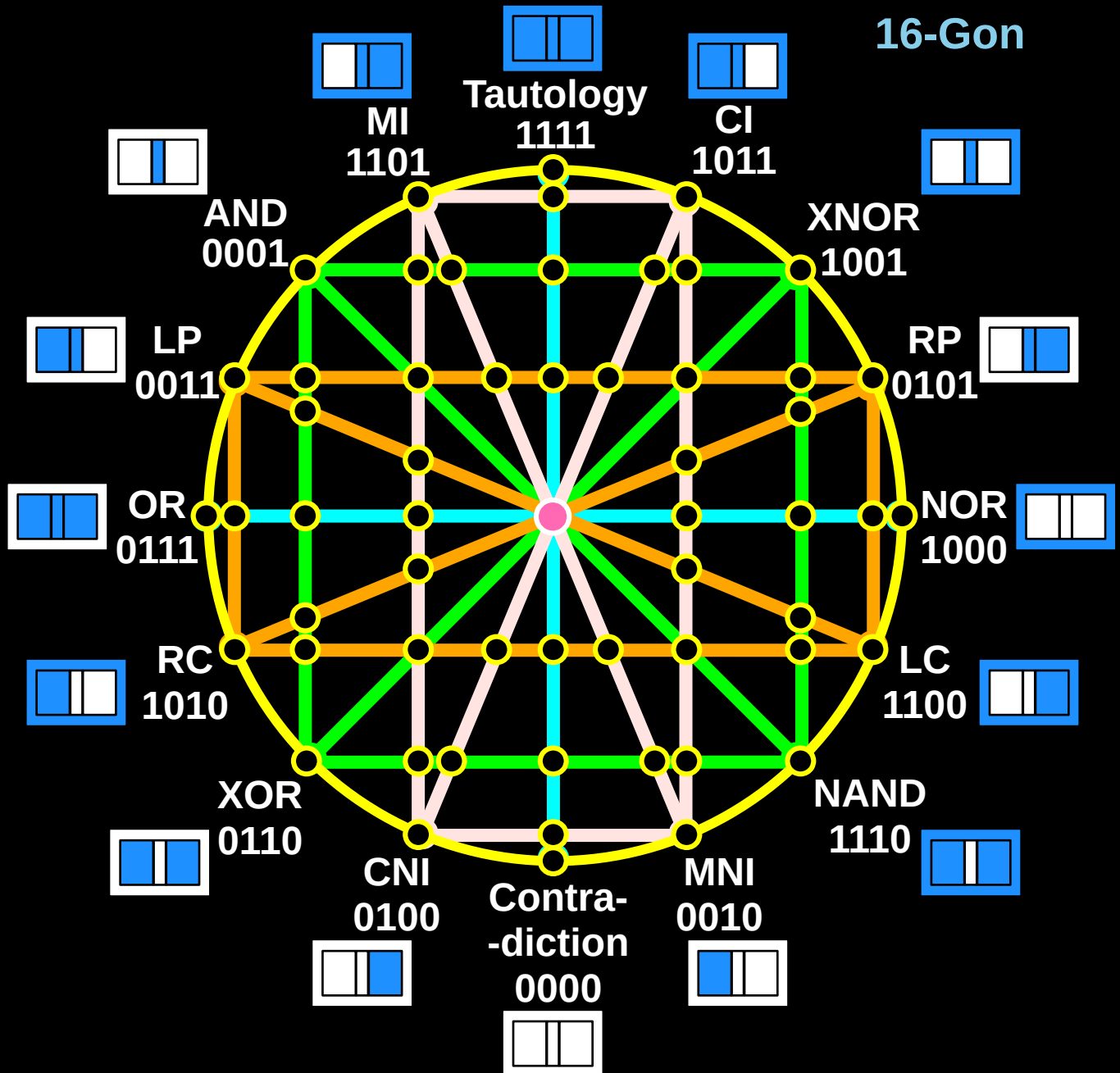
// whenLoaded.js

```
function whenLoaded()  
{  
    loadSounds();  
  
    makeLogicCalculator("And");
```

```
makeLogicGateButtons();  
makeTrueAiDiagram();  
makeCredits();  
}
```

True Artificial Intelligence System

16-Gon



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**This book is created by the
College of Scripting Music & Science.**

**Always remember, that each time you write a script
with a pencil and paper, it becomes imprinted so
deeply in memory that the material and methods are
learned extremely well.**

**When you Type the scripts, the same is true. The
more you type and write out the scripts by keyboard
or pencil and paper, the more you will learn
programming!**

**Write and Type every example that you find.
Keep all of your scripts organized.**

**Every script that you create increases your
programming abilities.**

**SEEING CODE, is one thing,
but WRITING CODE is another.**

Write it, Type it, Speak It, See It, Dream It.

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