

Logic

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Logic

And

`and` · `and(value: boolean{2..})`

True only when every condition given is true. It stops at the first false one without evaluating the rest, exactly as the `&&` operator does.

Parameters

Name	Type	Description
<code>value</code>	<code>boolean</code> (2 or more)	A condition to test. At least two are required, and any number may follow.

Returns `boolean` : True when every condition is true.

Examples

```
and(PUMP_ON, LEVEL > 40, COUNT == 3) # true
and(false, NEVER_WRITTEN > 0) # false
```

Bit test

`bit` · `bit(base: int, bit: int)`

Tests one bit of a whole number - how a packed status word from a PLC or Modbus device is split into individual alarms.

Parameters

Name	Type	Description
<code>base</code>	<code>int</code>	The packed word to read.
<code>bit</code>	<code>int</code>	Which bit to test, counting from 0 at the least significant end.

Returns `boolean` : True when that bit is set.

Examples

```
bit(5, 0) # true
bit(5, 1) # false
bit(REGISTERS[3], 0) # true
```

Exclusive or

`xor` · `xor(value: boolean{2..})`

True when an odd number of the conditions given are true.

Parameters

Name	Type	Description
<code>value</code>	<code>boolean</code> (2 or more)	A condition to test. At least two are required, and any number may follow.

Returns `boolean`: True when the conditions disagree.

Examples

```
xor(true, false) # true
xor(true, true, true) # true
xor(true, true) # false
```

Not

`not` · `not(value: boolean)`

Inverts a condition.

Parameters

Name	Type	Description
<code>value</code>	<code>boolean</code>	The condition to invert.

Returns `boolean`: True when the value is false.

Examples

```
not(PUMP_ON) # false
not(LEVEL > 90) # true
```

Or

`or` · `or(value: boolean{2..})`

True when at least one condition given is true. It stops at the first true one without evaluating the rest, exactly as the `||` operator does.

Parameters

Name	Type	Description
<code>value</code>	<code>boolean</code> (2 or more)	A condition to test. At least two are required, and any number may follow.

Returns `boolean`: True when any condition is true.

Examples

```
or(LEVEL > 90, PUMP_ON) # true  
or(false, false) # false
```

This page describes Amtiri Script 5.5.0 as shipped with Data Orchestration engine 6.22.0 and Site 1.27.0.