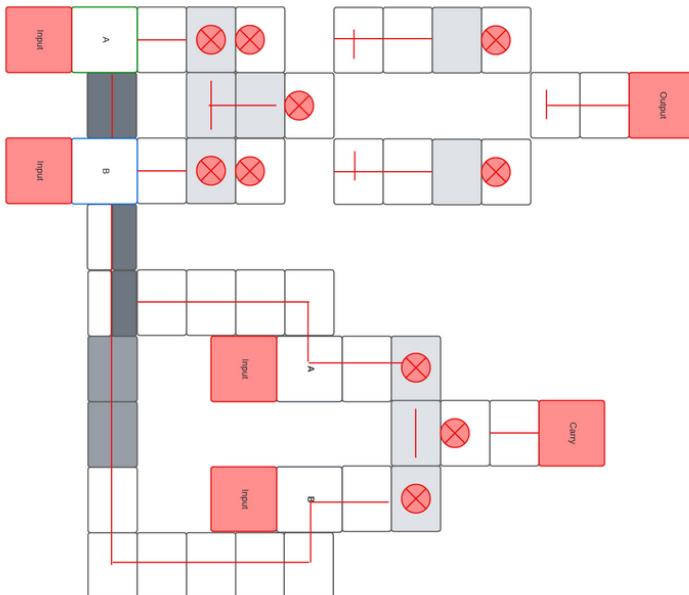
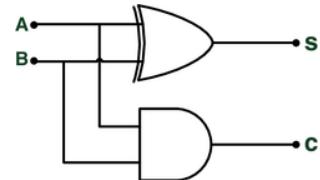


Half-Adder



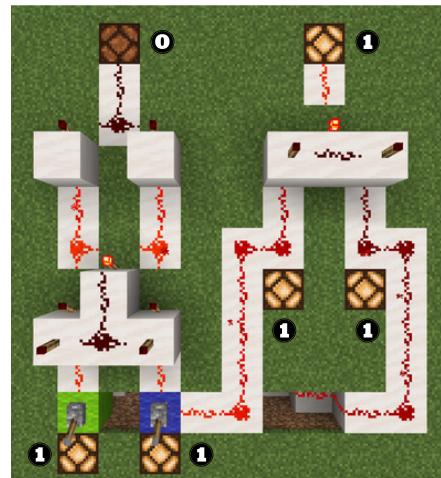
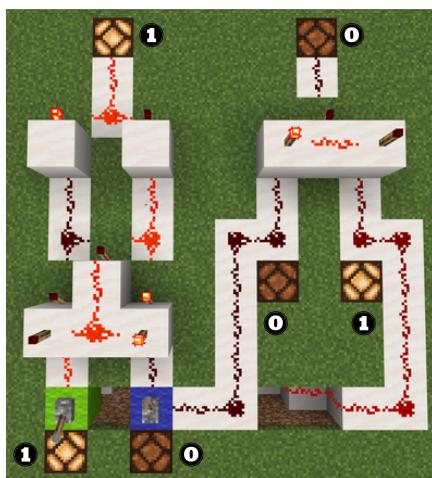
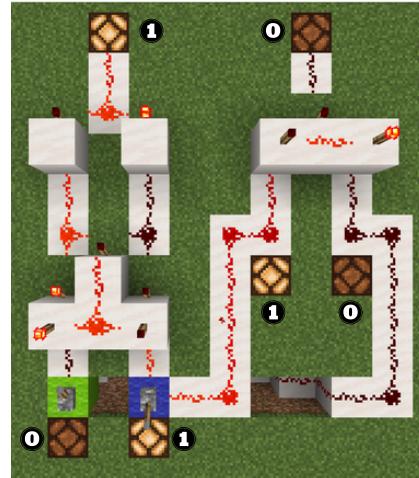
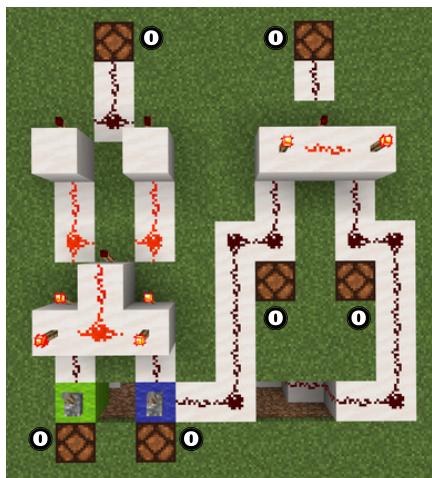
Green: input A (lever)
 Blue: input B (lever)
 - : redstone powder
 ● : redstone torch
 ○ : redstone lamp
 □ : one quartz block
 □□ : two quartz blocks
 □□□ : three quartz blocks
 □□□□ : one quartz block on top and - three quartz blocks under



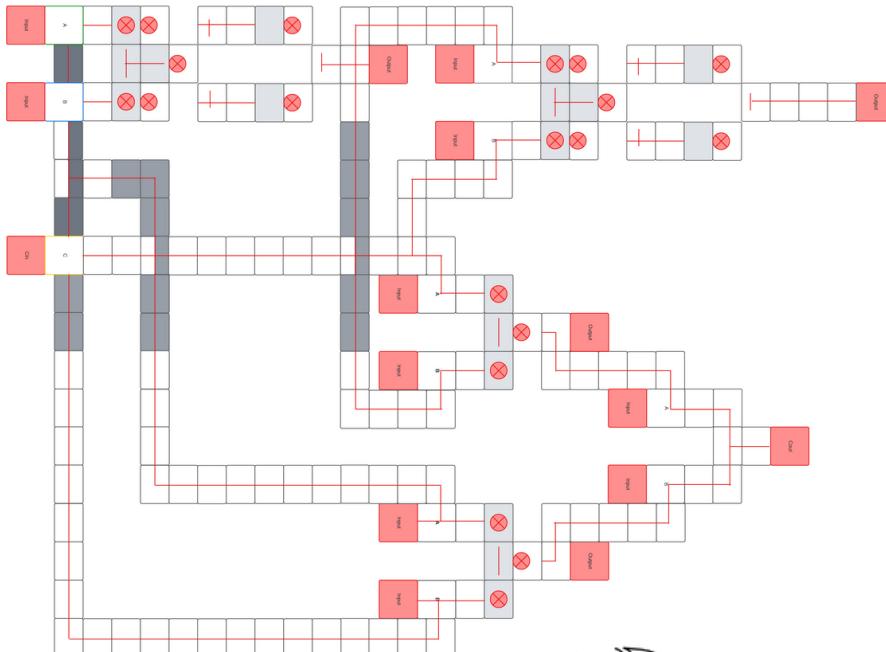
Inputs		Outputs	
A	B	Sum	Carry
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1

https://www.researchgate.net/figure/Half-adder-circuit-diagram_fig1_272015389
<https://www.javatpoint.com/half-adder-in-digital-electronics>

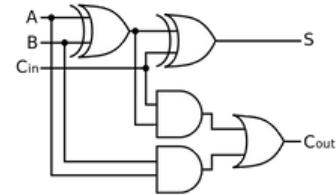
Minecraft implementation



Full-Adder



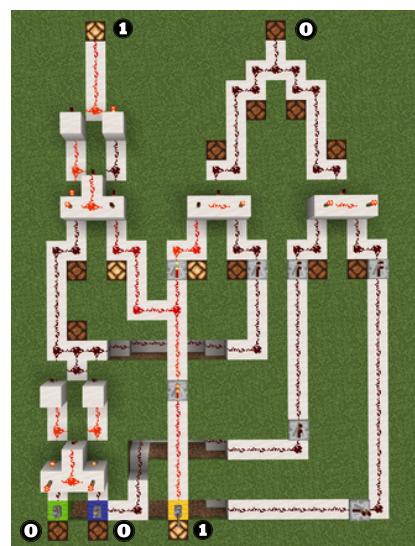
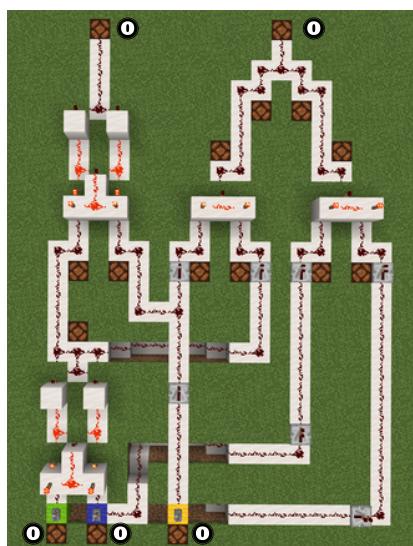
Green: input A (lever)
 Blue: input B (lever)
 Yellow: Cin C (lever)
 Red: redstone powder
 Orange: redstone torch
 Red: redstone lamp
 White: one quartz block
 Light gray: two quartz blocks
 Dark gray: - two quartz blocks
 Gray: - three quartz blocks
 Dark gray: one quartz block on top and - two quartz blocks under
 Light gray: one quartz block on top and - three quartz blocks under
 Red: repeater



Inputs			Outputs	
A	B	Cin	Sum	Cout
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

[\(https://commons.wikimedia.org/wiki/File:Full-adder.svg\)](https://commons.wikimedia.org/wiki/File:Full-adder.svg)
<https://www.javatpoint.com/full-adder-in-digital-electronics>

Minecraft implementation



Minecraft implementation

