Project Title:
3-Bit Password Checker (Digital Lock)
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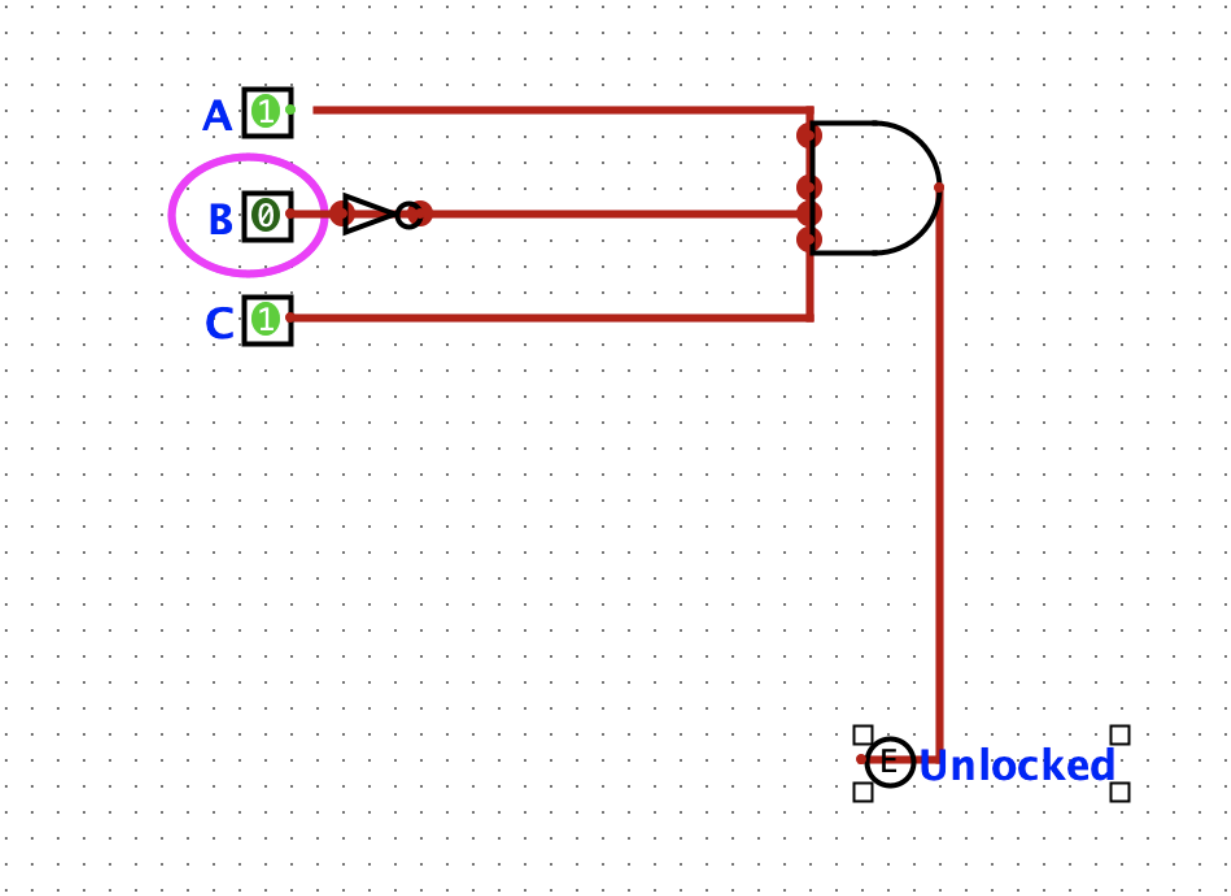
Boolean Expression Used:
F(A, B, C) = A · B' · C
Truth Table:

A	B	C	F(UNCLOCKED)
0	0	0	0
0	1	0	0
0	1	1	1
0	0	0	1
0	0	1	1
1	1	1	1



Brief Description:
This circuit simulates a basic password-activated lock system using digital logic gates. It uses a NOT gate to invert the B input and a 3-input AND gate to evaluate the condition A = 1, B = 0, and C = 1. The “Unlocked” output only goes high when the exact binary input 101 is entered.