Mini-Project: Security System 3

Create a security system that turns on an LED after pushing the correct code into two buttons. The system should allow multiple attempts, and “lock out” a user who has failed the passcode 3 times.

Suggested Prerequisites
- Circuits Intro
- Programming Intro
- Conditional Statements
- Loops

Specification

- The system should have two pushbuttons. (We will name them A and B).
- When the system starts, the user should press the passcode into the buttons.
- The passcode should be 4 characters long.
  - For example, if the passcode was AABA, then the user should press A twice, B once, and A once
- If the user enters the correct 4-character passcode, a green LED turns on indefinitely.
- If the user enters the wrong 4-character passcode, a red LED blinks once.
- The user can enter another 4-character passcode, and repeat the last two lines.
- If the user fails 3 times a red LED turns on indefinitely.