Project Name: Push Button Combination Lock

Project Description:

Nowadays, many products such as briefcases, doors are protected by combination locks. There are keypad modules for Arduino that can help us set a combination of different things. We are going to explain how can create a push button combination lock for safety.

How It Works:

The project will help us to set combination passwords and we can set passwords by using 1-6 digits, When we will push the buttons, and the combination is matched the green LED will be turned on and if the combination is not matched the red LED will indicate that the password is wrong.

For Change The Combination Password:

We can change combination password from Arduino code, first of all, we have to open the code and find the code line, like

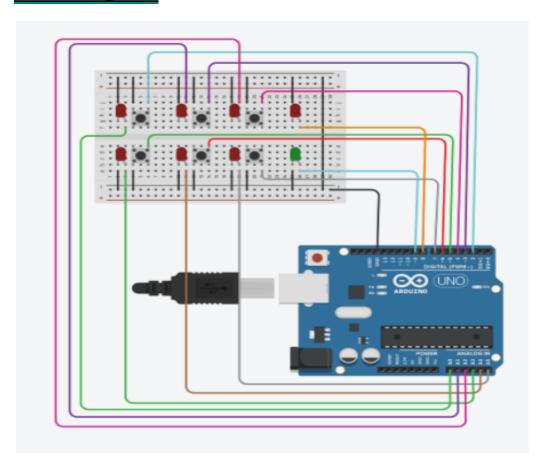
int code[] = {6,5,5,4,3,2};

and, we can change the sequence as our own security code.

Equipment:

- 1. Small Breadboard
- 2. Arduino
- 3. LED Red
- 4. LED Green
- 5. Push Button
- 6. Wire

Circuit Diagram:



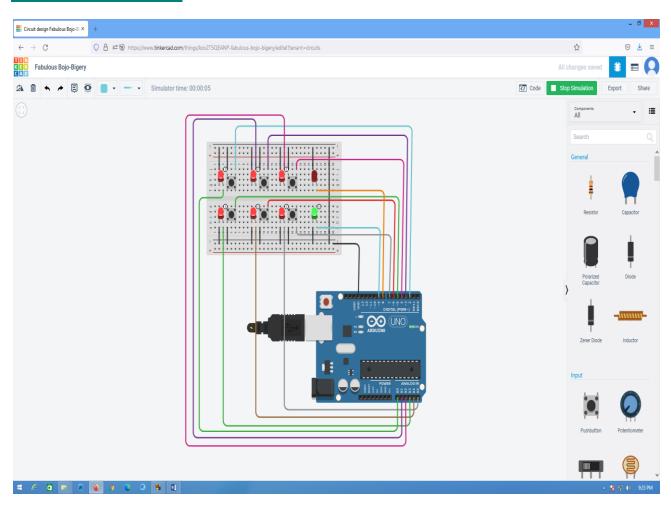
Advantages:

- 1. We don't need any key to open the lock. We just need to memorize 6 digits.
- 2. Tough to break the locks. This types of lock doesn't look like a manually lock. So, it would be hard to break the lock.
- 3. One time installation. So we can get free maintenance.
- 4. Perfect for the elderly or disabled person. They can easily open the lock using digits.
- 5. Owners can control it by themselves. Anytime owner can change the lock digits.
- 6. It can be used for door lock, briefcase lock, and many more.

Disadvantages:

- 1. The system will not work if the power system falls. The whole lock system based on electricity.
- 2. If the person forgets the pin or digits, he will be failure to open the lock.
- 3. Do not share the pin with the people. It could hamper the lock system and sometimes it is risky for the safety measures.

Project ScreenShot:



THANK YOU