GeoTashfeen

Digital Inputs

1   Overview:

In this lesson, you will learn to use push buttons with digital inputs to turn an LED on and off. Pressing the button will turn the LED on; pressing the other button will turn the LED off.

2   Component Required:

(1) x Uno R3

(1) x 830 Tie-points Breadboard

(1) x 5mm red LED

(1) x 220 ohm resistor

(2) x push switches

(7) x M-M wires (Male to Male jumper wires)

3   Component Introduction:

- **PUSH SWITCHES**

Switches are really simple components. When you press a button or flip a lever, they connect two contacts together so that electricity can flow through them.
The little tactile switches that are used in this lesson have four connections, which can be a little confusing.
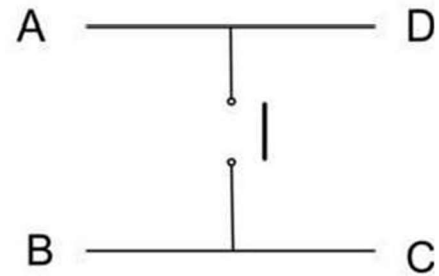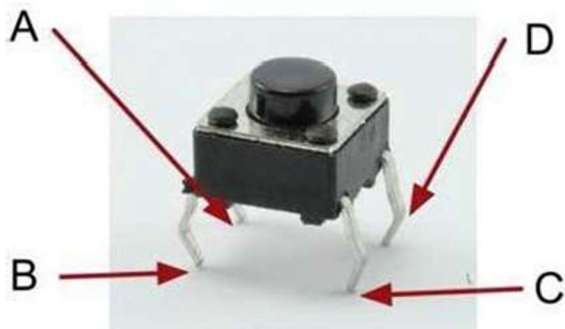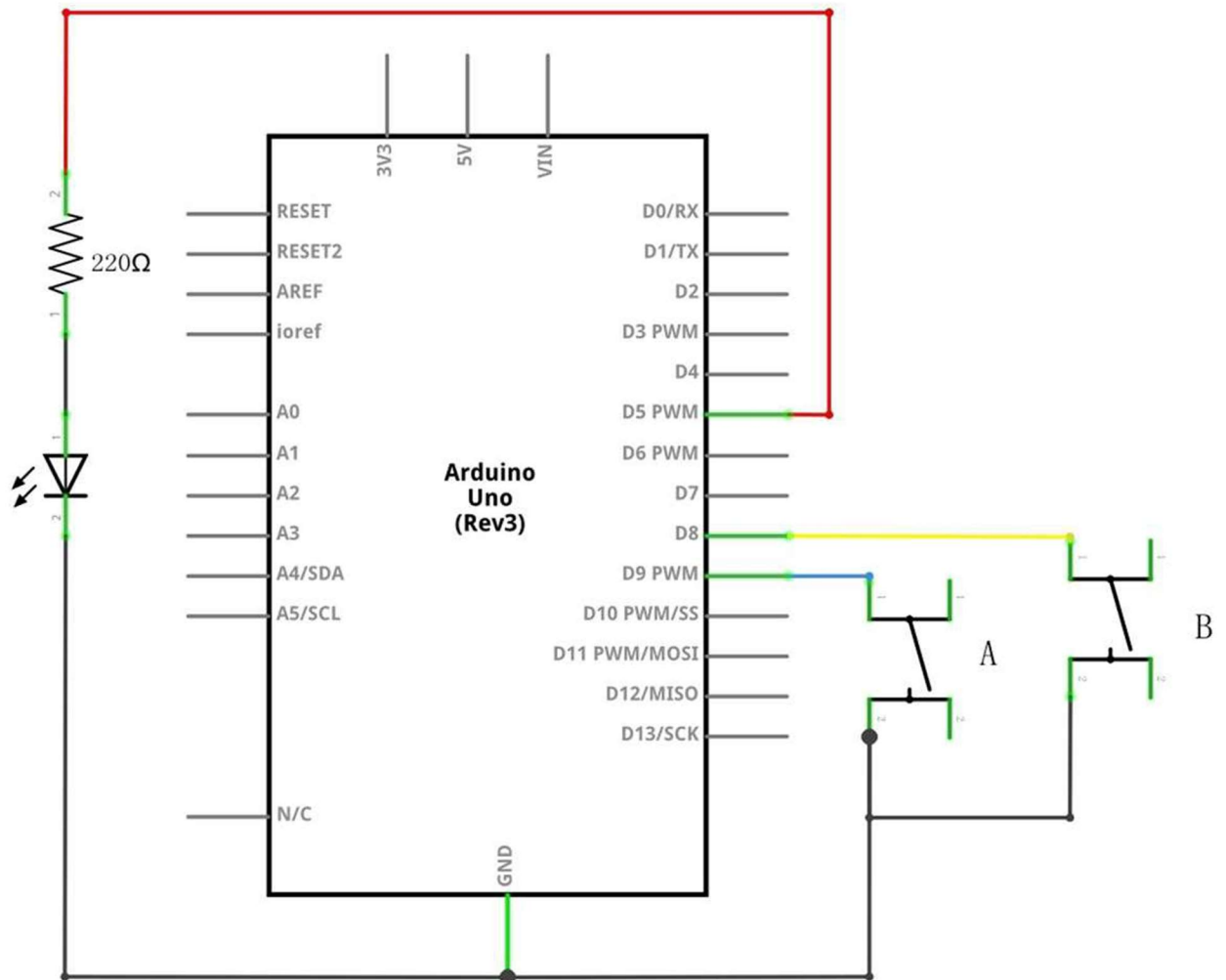

Actually, there are only really two electrical connections. Inside the switch package, pins B and C are connected together, as are A and D.
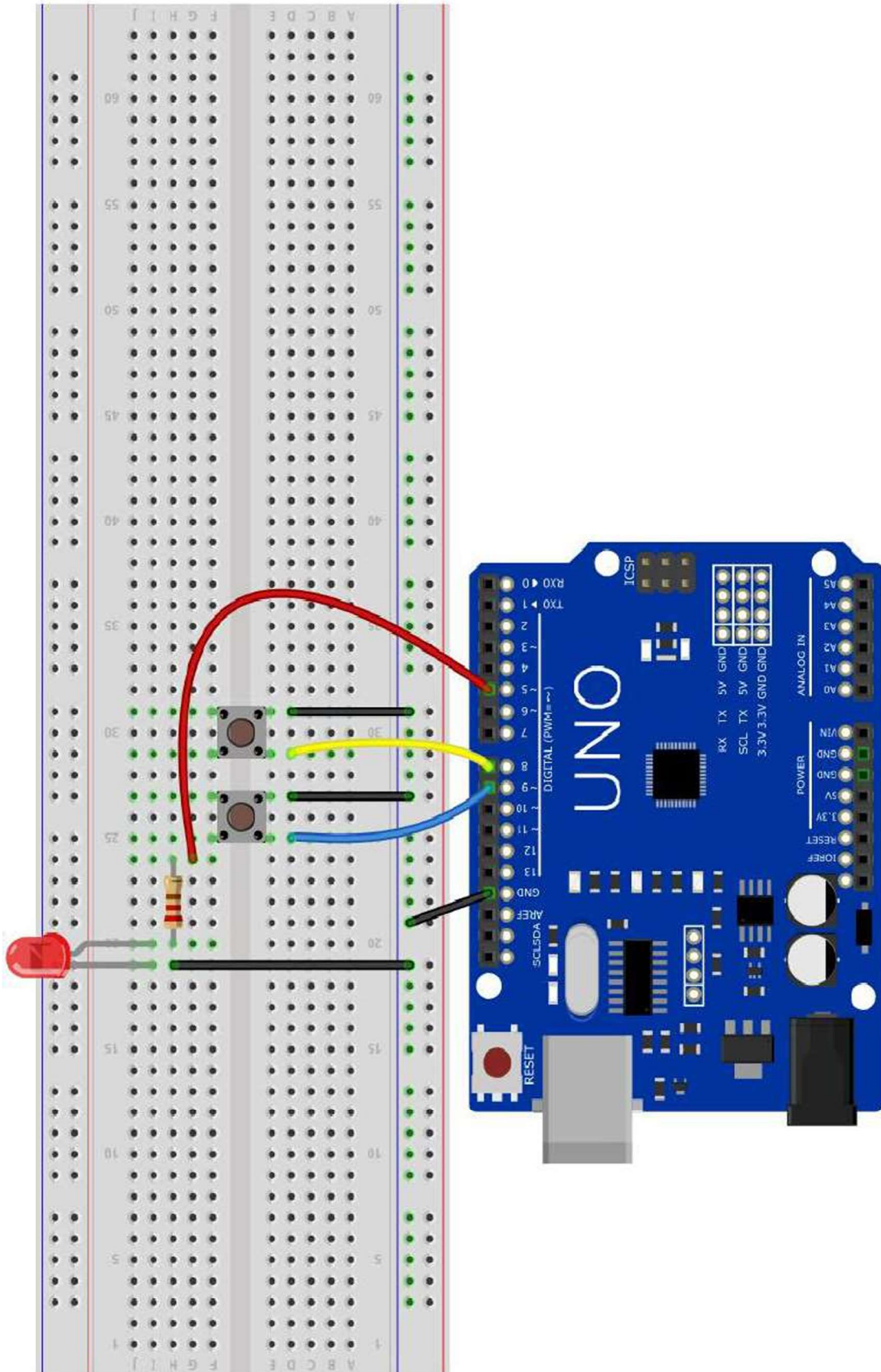
4   Connection:

- **Shematic**

5 Wiring diagram:

Although the bodies of the switches are square, the pins protrude from opposite sides of the switch. This means that the pins will only be far enough apart when they are placed correctly on the breadboard.

Remember that the LED has to have the shorter negative lead to the left.