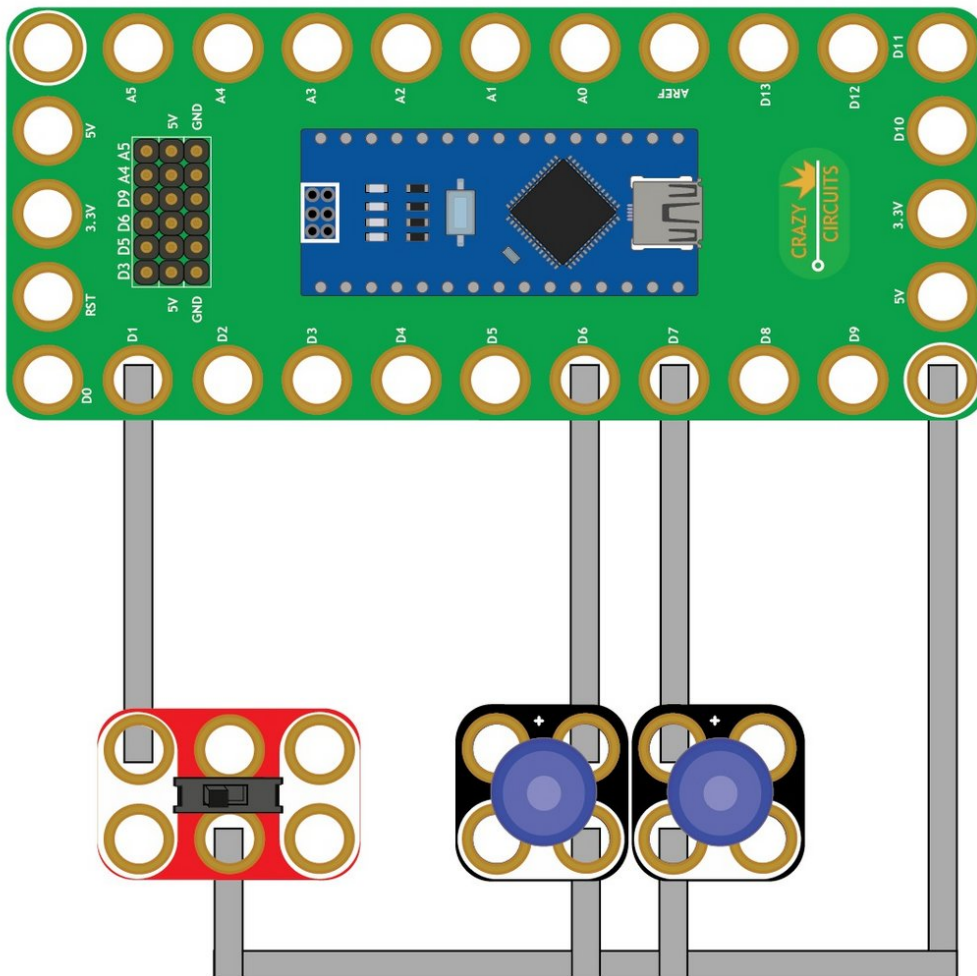




## 03 - Switch with 2 LEDs

Use our Programming 101 kit to control 2 LEDs with a switch.

Written By: Pete Prodoehl



# INTRODUCTION

Use our Robotics Board to control 2 LEDs with a switch.



## TOOLS:

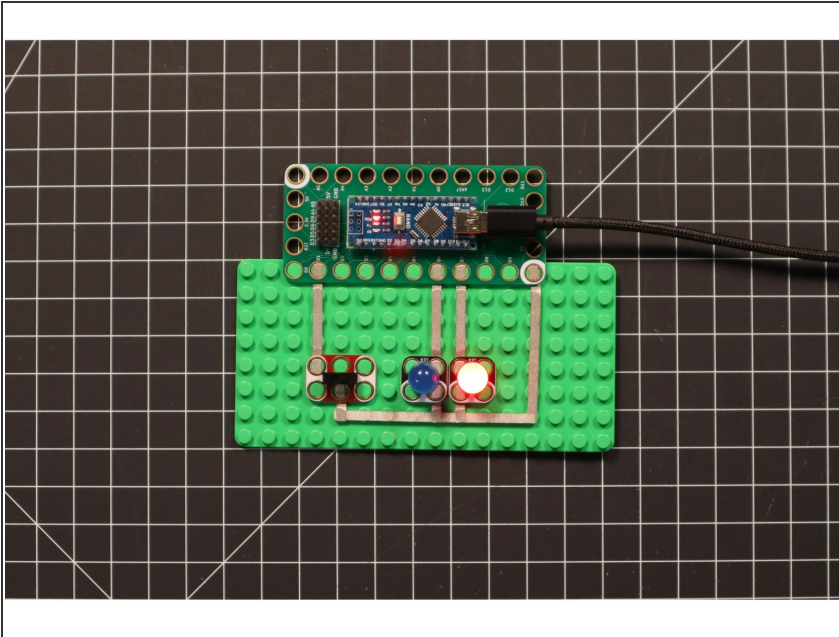
- [Scissors](#) (1)
- [Computer](#) (1)



## PARTS:

- [Crazy Circuits Robotics Board](#) (1)
- [Crazy Circuits Slide Switch Chip](#) (2)
- [Maker Tape 1/8th inch](#) (1)

## Step 1 — Build the Circuit



- Build the circuit as shown in the diagram using the components specified.

## Step 2 — Upload the Code

```
Switch with 2 LEDs | Arduino 1.8.13

1 /*
2  * Switch_with_2_LEDs.ino
3  *
4  * https://www.browndoggadgets.com/
5  *
6  */
7
8
9
10 // set variable name for a digital input pin
11 const SwitchPin = 1;
12
13 // set variable names for two different digital output pins
14 const LEDpin1 = 6;
15 const LEDpin2 = 7;
16
17 // the setup runs once at the beginning of the sketch
18 void setup() {
19   // the LEDs are set to function as outputs
20   pinMode(LEDpin1, OUTPUT);
21   pinMode(LEDpin2, OUTPUT);
22
23   // the switch is set to function as an input with a special built-in pull-up resistor
24   pinMode(SwitchPin, INPUT_PULLUP);
25
26 }
27
28 // the loop runs forever after the setup is complete
29 void loop() {
30   // check if the switch is in the on position
31   if (digitalRead(SwitchPin) == LOW) {
32     // set the first output pin high to turn on the first LED
33     digitalWrite(LEDpin1, HIGH);
34     // set the second output pin low to turn off the second LED
35     digitalWrite(LEDpin2, LOW);
36   }
37   // this happens if the switch is in the off position
38   else {
39     // set the first output pin low to turn off the first LED
40     digitalWrite(LEDpin1, LOW);
41     // set the second output pin high to turn on the second LED
42     digitalWrite(LEDpin2, HIGH);
43   }
44 }
```

- Upload the Arduino sketch to the Robotics Board.
- You can find the code here: <https://github.com/BrownDogGadgets/Progr...>