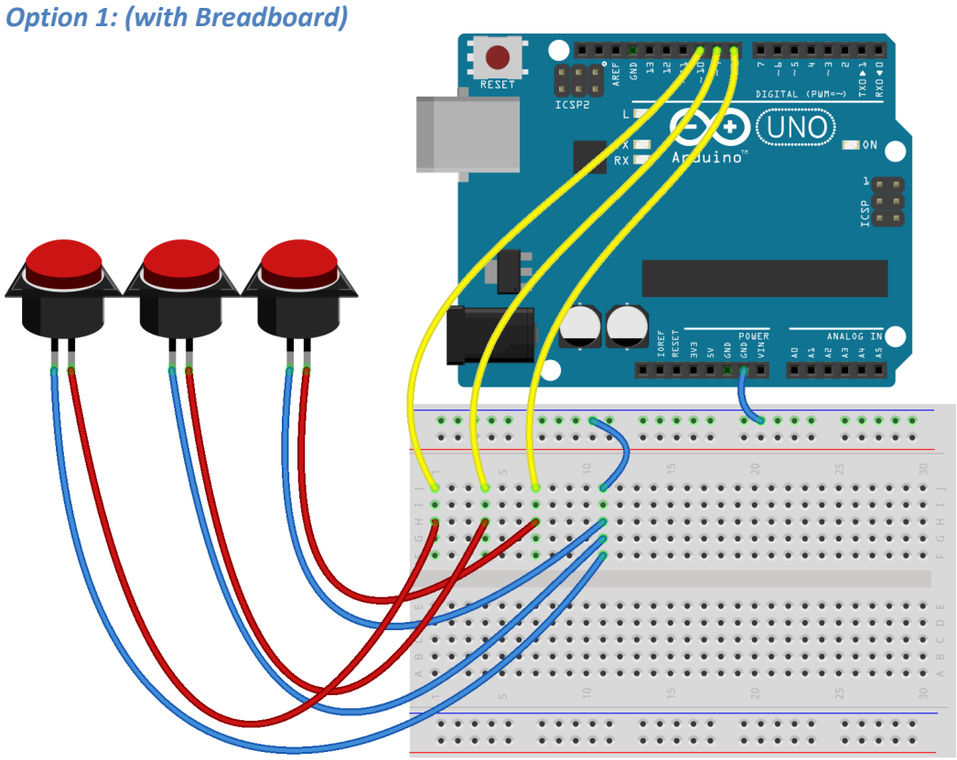
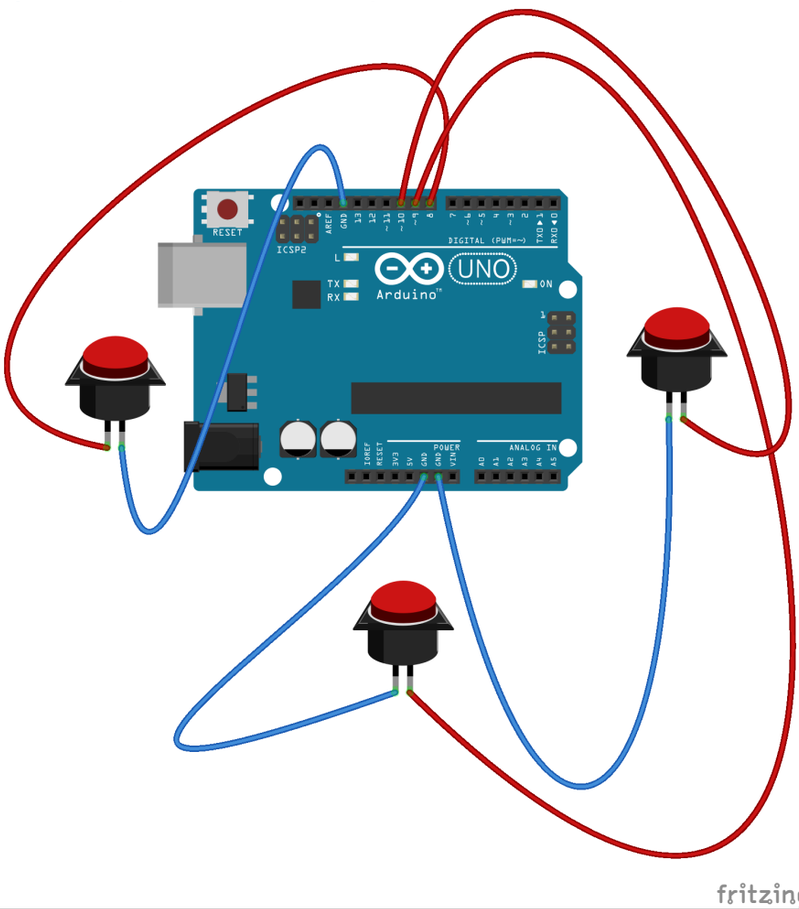
FV2_Multiple_Buttons

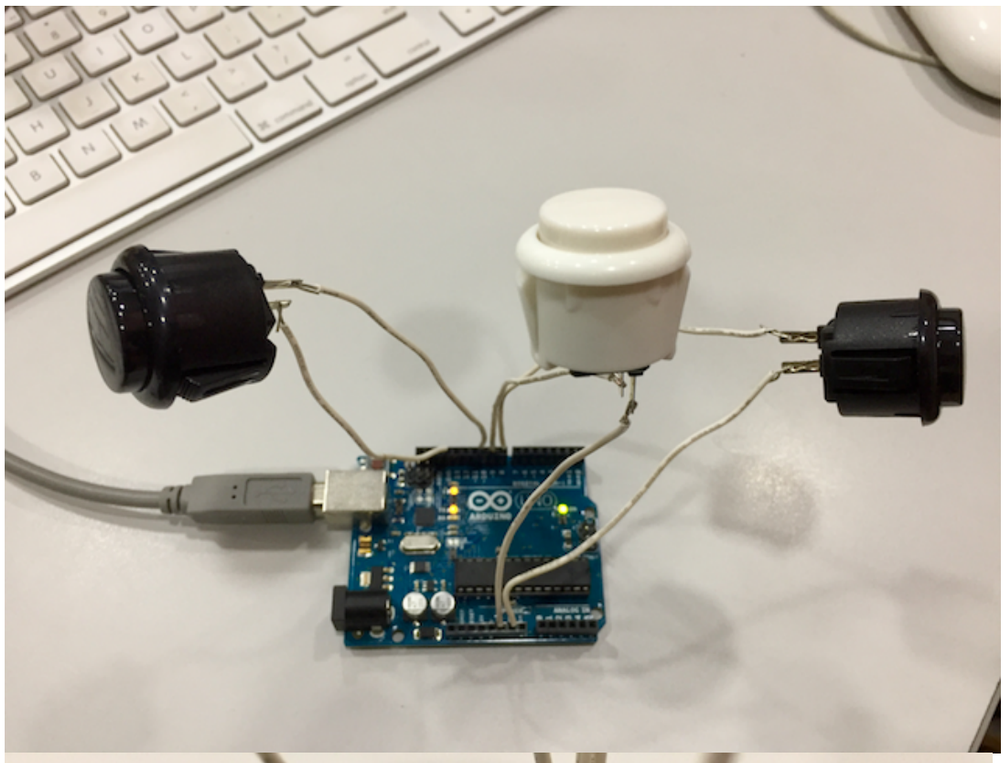
Arduino Hookup

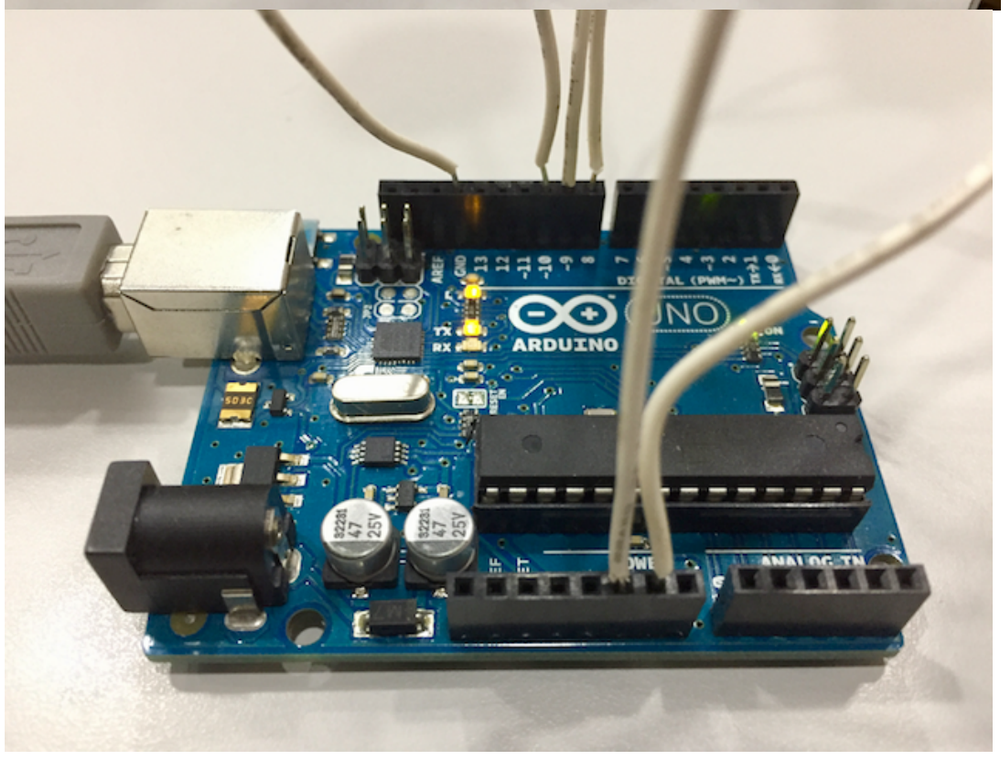
Option 1: (with Breadboard)



Option 2: (without Breadboard)






ARDUINO

Arduino Code Changes:

```
1  //--------------------------------
2
3  int button1Pin = 8; // button or
4  int button2Pin = 9; // button or
5  int button3Pin = 10; // button c
6
7
8  int button1Val; // an empty vari
9  int button2Val; // an empty vari
10 int button3Val; // an empty vari
11
```

```
22   Serial.begin(9600); // begin serial c
23
24   digitalWrite(button1Pin, HIGH); // se
25   digitalWrite(button2Pin, HIGH); // se
26   digitalWrite(button3Pin, HIGH); // se
27
28   establishContact(); // send a byte to
```

```
37
38
39   button1Val = digitalRead(button1Pin); // assign
40   button2Val = digitalRead(button2Pin); // assign
41   button3Val = digitalRead(button3Pin); // assign
42
43
```

```
46
47   Serial.write(START_BYTE); // print *
48   Serial.print(DELIMITER); // then ,
49
50   Serial.print(button1Val); // then the value
51   Serial.print(DELIMITER); // then ,
52
53   Serial.print(button2Val); // then the value
54   Serial.print(DELIMITER); // then ,
55
56   Serial.print(button3Val); // then the value
57   Serial.print(DELIMITER); // then ,
58
59   Serial.write(END_BYTE); // then #
60
```

```
*,1,1,1,#
*,1,1,1,#
*,1,1,1,#
*,1,1,1,#
```

Console | Errors

Processing Code Changes:

```
int [] sensor = null;
// check if Arduino is communicating
boolean firstContact = false;

// IMPORTANT------------------------------
// The variable below will be assigned a v
int button1;
int button2;
int button3;

// ---------------------------------------
// ---------------------------------------

void setup() {
  // put your setup code here, to run once

  // set the canvas (width, height)
```

```
  if (button1 == 0) { // if button1 is off...
    // do this:
    ellipse(200, 100, 100, 100);
  } else { // otherwise...
    // do this:
    ellipse(200, 200, 100, 100);
  }

  if (button2 == 0) { // if button2 is off...
    // do this:
    ellipse(400, 100, 100, 100);
  } else { // otherwise...
    // do this:
    ellipse(400, 200, 100, 100);
  }

  if (button3 == 0) { // if button3 is off...
    // do this:
    ellipse(600, 100, 100, 100);
  } else { // otherwise...
    // do this:
    ellipse(600, 200, 100, 100);
  }
```

```
  // ...to the "int button1,2

  // assign the value of a se
  button1 = sensor[1];
  button2 = sensor[2];
  button3 = sensor[3];

  // -------------------------
}
```

Use the SerialPortFinder Processing Sketch to find this number:

```
usbPort =new Serial(this, Serial.list()[1], 9600);
```

FV2_SerialPortFinder | Processing 3.3.7

Java

FV2_SerialPortFinder

```
// import the Serial library:
import processing.serial.*;

// create an object from Serial class and name it:
Serial myPort;

void setup(){
  // print a list of the serial ports:
  printArray(Serial.list());
}
```

```
[1] "/dev/cu.usbmodem1411"
```

Console | Errors