

## 1 Interrupt.ino

```
1 // using attachInterrupt(), count the number of times a signal on Digital
2 // Pin 2 goes low (0V).
3 // Next, print the number of times that have gone low
4
5 // First, init global variables
6 // Since count values are not ever going to be negative, use unsigned ints
7 volatile unsigned int count = 0; // for the ISR
8 volatile unsigned int last_count = 0;
9 // This is a software debounce to prevent the values from blowing up
10 volatile short trig = 1;
11
12 void setup()
13 {
14     Serial.begin(9600);
15     pinMode(2, INPUT_PULLUP);
16     //(interrupt, function, PINMODE)
17     attachInterrupt(0, pin2_ISR, FALLING);
18 }
19
20 // Now, here is the Interrupt Service Routine (ISR) for Pin 2
21 void pin2_ISR(){
22     if(trig){
23         count++;
24         // By setting trig to zero (false), this acts as a software debounce
25         trig=0;
26     }
27 }
28
29 void loop()
30 {
31     if(!trig){
32         last_count = count;
33         Serial.println(last_count);
34         delay(100);
35         // Allow trigger to run again
36         trig=1;
37     }
38 }
```