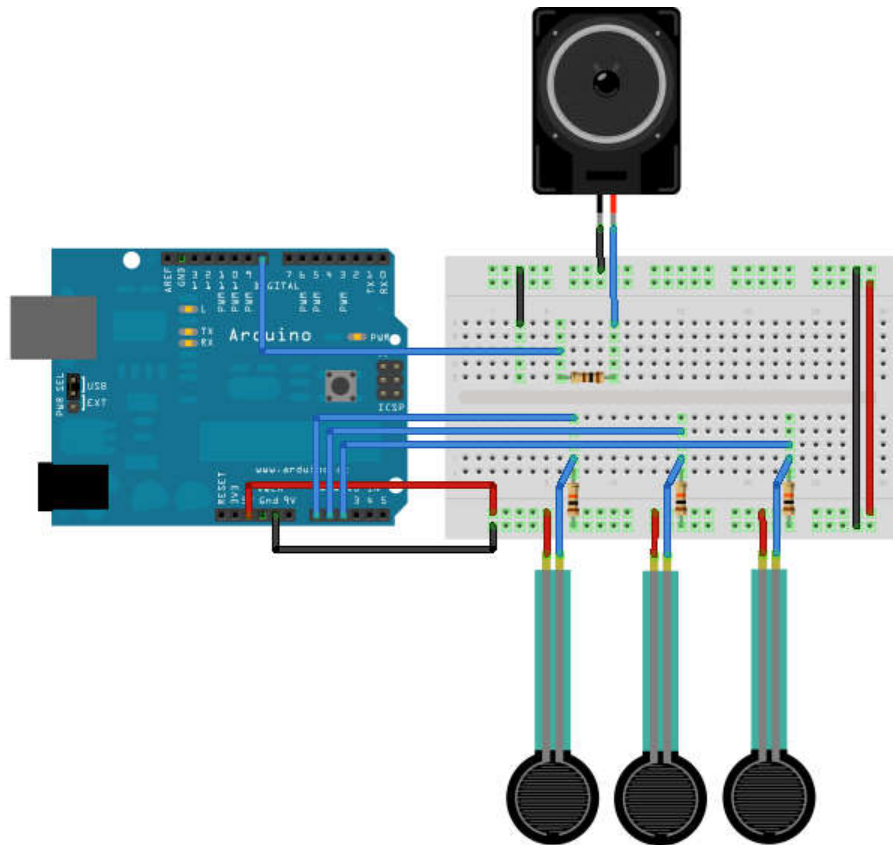
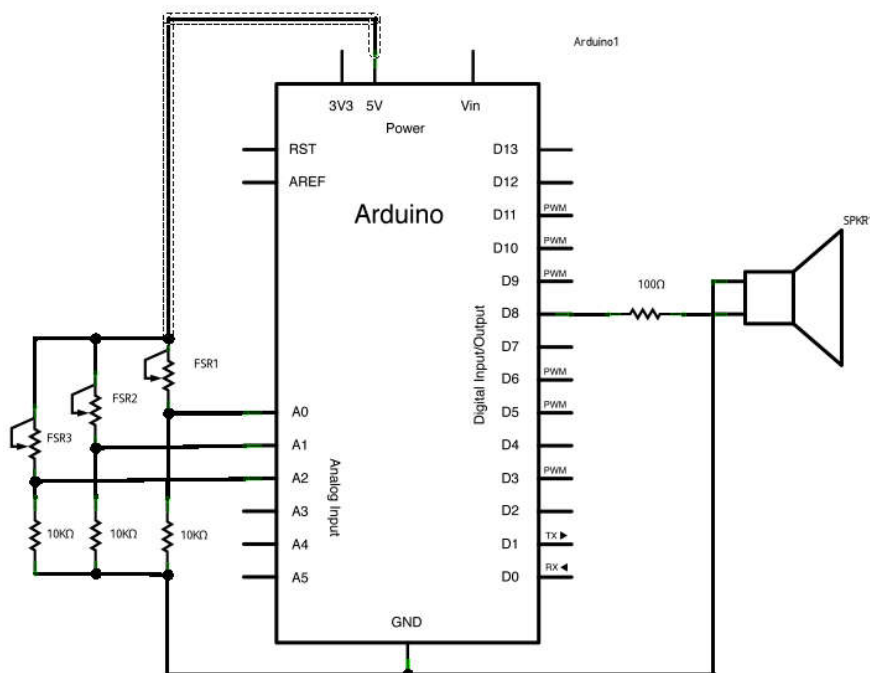


Arduino – Tone Keyboard

A cura del prof. Giuseppe Spalierno 20-12-2011



Questo esempio mostra come usare il comando `tone()` per generare differenti suoni in base all'ingresso selezionato. Per questa esercitazione l'hardware necessario consiste in un cicalino piezoelettrico, 3 resistenze da 10KΩ e cavetti di collegamento. Lo schema elettrico corrispondente è il seguente:



```

/*
  keyboard

  Plays a pitch that changes based on a changing analog input circuit:
  * 3 force-sensing resistors from +5V to analog in 0 through 5
  * 3 10K resistors from analog in 0 through 5 to ground
  * 8-ohm speaker on digital pin 8

  created 21 Jan 2010
  modified 30 Aug 2011
  by Tom Igoe

This example code is in the public domain.

http://arduino.cc/en/Tutorial/Tone3

*/

#include "pitches.h"

const int threshold = 10;  // minimum reading of the sensors that generates a note

// notes to play, corresponding to the 3 sensors:
int notes[ ] = {
  NOTE_A4, NOTE_B4, NOTE_C3 };

void setup() {

}

void loop() {
  for (int thisSensor = 0; thisSensor < 3; thisSensor++) {
    // get a sensor reading:
    int sensorReading = analogRead(thisSensor);

    // if the sensor is pressed hard enough:
    if (sensorReading > threshold) {
      // play the note corresponding to this sensor:
      tone(8, notes[thisSensor], 20);
    }
  }
  Serial.println();
}

```