// MIDI keyboard with SuperCollider //

MIDIIn.connectAll; // Run this after you connect a keyboard to your computer //

Tuning.directory;

Scale.directory;

~scale = Scale.chromatic; // Run this! You can change your tuning here as well, just use the sclae directory above //

(

// Load a Synth! This is JUST AN EXAMPLE - you can load ANY synth to the keyboard! //

SynthDef("quick2", {arg freq = 440, amp = 0.1, gate = 1;

var snd, env;

env = Env.adsr(0.01, 0.1, 0.3, 2, amp).kr(2, gate);

snd = Saw.ar([freq, freq \* 2], env);

Out.ar(0, snd)

}).add;

)

(

// Now run this to set up the the key board //

var keys, scale;

keys = Array.newClear(128);

scale = ~scale;

MIDIdef.noteOn(\on, { arg vel, noteNum;

var node, freq, octave;

octave = noteNum.div(12);

freq = scale.degreeToFreq(noteNum%12, 0.midicps, octave);

node = keys.at(noteNum);

if(node.notNil, {

node.release;

keys.put(noteNum, nil);

});

node = Synth.new("quick2", [

\freq, freq,

\amp, vel/127

]);

keys.put(noteNum, node);

[noteNum, octave, freq, vel/127].postln;

});

MIDIdef.noteOff(\off, { arg vel, noteNum;

var node;

node = keys.at(noteNum);

if (node.notNil, {

node.release;

keys.put(noteNum, nil);

});

});

)