// 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 //

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// 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);

 });

});

)