6.111 Project Checkoff List
FPGA Synthesizer
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Commitment
Functional synthesizer with no "special features" (effects, enveloping) with button input and
basic recording functionality.
    ☐ basic sine wave tone generator mixed for output
    ☐ buttons (not serialized protocol) used for input
    ☐ recorder can record or playback a single track

Goal
Synth with MIDI input. Multi-track recording & looping. ADSR enveloping and at least one static
sound effect.
    ☐ MIDI keyboard interfaced for input
    ☐ Multiple tracks can be recorded into memory
    ☐ Tracks can be played back and recorded over to make more complex tracks
    ☐ Enveloping implemented so that each tone attacks and dies down to add to the
complexity of the sound
    ☐ One effect or instrument can be enabled to change the sound of the output

Stretch
Add multiple effects, with adjustment parameters. Extra memory for longer tracks.
    ☐ extra effects are implemented
    ☐ effects can be adjusted where reasonable (for example, an echo effect whose fade
time can be adjusted)
    ☐ extra memory has been integrated so longer tracks can be recorded