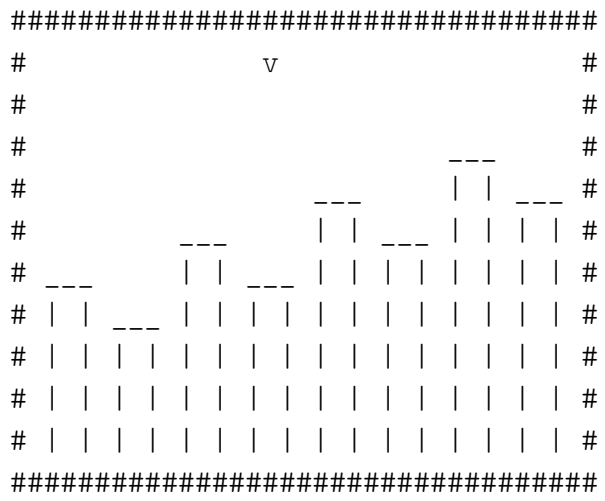
Luke Jaffe
Microprocessor-Based Design
Due 04/04/16

Progress Report 2

I. Achievements

- Set up interrupts for all push buttons with bounce/debounce handled
- Create simple display struct for storing the different frequency band “levels”
  - Contains array for frequency bands
  - Has index of current selected band
- Push button interrupt code toggles and increments bands
  - Left and right buttons switch the current band
  - Up and down buttons increment/decrement the current band
  - Center button resets band balues and selected band to default
- Create pc-side display interface with ascii art (temporary till OLED is working)
  - Takes serial ouput from zedboard
  - Decodes output to show the bands and their current values
  - v points down to current selected band
  - Built to run with the watch command so ascii art updates every 0.1 s
  - Here's what it looks like at given point in time:



II. Problems Faced and Solution Candidates

- No problems for my part of project right now, but currently stalled by other parts
- I have set up infrastructure to connect to the frequency domain processing and OLED driver when they are ready
- Since my part is mostly finished, I will start helping teammates with their parts (which are more challenging to begin with)

III. Plans for Next Week

- Work with Sean to refine interface between audio chunks and FFT input
- Work with Dan to get OLED working