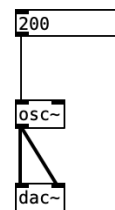


Music 175: Psychoacoustics  
Assignment #1,  
Due: Tuesday April 7, 2020

- Download Pd from <http://msp.ucsd.edu/software.html>.
- Create a new patch: **File**→**New**.
- Create a sinewave oscillator: **Put**→**Object** then type `osc~` into box.
- Change frequency:
  - **Put**→**Number** then connect outlet of the number box to the left inlet of `osc~`;
  - (you may move boxes around so they are nicely aligned);
  - toggle edit mode (**Edit**→**Edit Mode** or `command-e`).
- Listen to audio:
  - **Put**→**Object** then type `dac~` into box;
  - connect outlet of `osc~` to both left and right inlets of `dac~`;
  - **lower audio level on your computer (about 1/4 way)**;
  - click the DSP box (in Pd window) — a checkmark indicates **on**.
- What is the lowest and highest frequency you can hear?
  - create comment boxes (**Put**→**Comment**) and type
    - \* “lowest audible frequency: nnn”
    - \* “highest audible frequency: nnn”
  - scroll the number box downward until you can’t hear the sound then input number into appropriate comment box;
  - scroll the number box upward until you can’t hear the sound; note: you’ll likely find scrolling from your lowest value is too slow—click the number box and input larger values (e.g. 1000, 2000, 11000, etc.); input number into appropriate comment box;
  - repeat with/without headphones and include **both** values in your comment boxes.
    - \* ”lowest audible frequency: nnn, nnn (headphones)”
    - \* ”highest audible frequency: nnn, nnn (headphones)”
- Your patch should look something like this:

Lowest audible frequency: nnn, nnn (headphones)  
Highest audible frequency: nnn, nnn (headphones)



- Submit on Canvas as `a1<yourname>.pd` (NOTE: `.pd` extension).