MAT 120 Pd Assignment 1 (Not to turn in) Fall 2023

Due date: Tuesday, Sep 5

I may ask for volunteers to demonstrate various parts of this assignment in class.

- 1. Test speakers or headphones on a workstation and verify that you have the volume functioning but turned down very low. Warning: Failure to do this step can result in very dangerous behaviour by launching Pd.
- 2. Open Pd and use file/new to open an empty patch.
- 3. Use [command] < e > to toggle between edit mode (hand cursor) and run mode (arrow cursor). You may need to move the mouse in order to see the toggle take effect. Toggle to edit mode (hand cursor) for the next steps.
- 4. Use the Put menu (or [command] < 1 > to place an object on the patch.) The object box appears where the cursor is placed on the patch.
- 5. At the cursor in this object box type: $osc^{\sim} 220$ (the space is required)
- 6. Click away from this object and the box should now change slightly to include inlets and outlets.
- 7. Click and drag to select the box and it will be highlighted.
- 8. Use shift-arrow keys to move the box around in big jumps, or just arrow keys to move it in small jumps. Place the object in the middle of the patch.
- 9. Put a new object box below the first one and type: * 0.5
- 10. Connect these two object boxes by clicking and holding on the lower left outlet of the osc^{\sim} box and dragging to the upper left inlet of the $* \sim$ box. You should get a solid connecting line after letting go.
- 11. Put a new object box below the previous one and type: dac \sim
- 12. Connect the dac^{\sim} box to the *^{\sim} box by clicking and holding on the lower left outlet of the *^{\sim} box and dragging to the upper left inlet of the dac box.
- 13. Make another connecting line from the same corner of the $*^{\sim}$ box to the upper right inlet of the dac^{\sim} box.
- 14. Toggle to run mode (arrow cursor)
- 15. With the volume still turned down very low, turn DSP on by clicking in the box on the main Pd Window, hear the sound produced, a sine wave at 220 Hz, and then click it again to turn DSP off. Alternatively, you can use [command]< / > to turn DSP on and [command]< . > to turn it off.