Homework # 0: Installing Python3
Due Date: Thursday, August 29th, 11:00 AM

This assignment provides instructions for installing Python3 on your local machine. This is needed for some in-class assignments.

Question 1: Install Python3 on your personal computer. Note that you may get warnings about installing/updating other packages. Please update/install these packages as well. Also follow instructions to setup a virtual environment(see `https://docs.python-guide.org/dev/virtualenvs/#virtualenvironments-ref`)

(a) If you have a Mac, access instructions using this link: `https://wsvincent.com/install-python3-mac/`

(b) If you have a Windows machine, try the following (note that these instructions have not been tested by the instructor): `https://docs.python-guide.org/starting/install3/win/`

(c) If you have a Linux machine, try the following (note that these instructions have not been tested by the instructor): `https://docs.python-guide.org/starting/install3/linux/`

Question 2: Test Python3 Installation and Audio Playback

(a) Per the prior instructions, use the source command to activate your virtual environment

(b) Use the pip command to install numpy, soundfile and sounddevice

(c) In the python3 interpreter (or in a file), execute the below commands. A person talking should be played through your speakers. Be sure that your volume is up. If you have issues, make sure that the output device is properly set (see `https://python-sounddevice.readthedocs.io/en/latest/usage.html#device-selection`)

    (a) import sounddevice as sndev

    (b) import soundfile as sndfl

    (c) filename = 'example.wav'

    (d) data, fs = sndfl.read(filename, dtype='float32')

    (e) sndev.play(data,fs)

(d) Exit python and deactivate your virtual environment