Assignment # 1, CSCI 480
Fall 2015

Due date: Wednesday, Oct 14, midnight.

- Implement a value noise function in python as outlined in the lecture notes and on the "Perlin Noise" website which actually discusses value noise, and not true Perlin noise: `http://freespace.virgin.net/hugo.elias/models/m_perlin.htm`
- Use a shuffled array for random numbers rather than a pseudo-random number generator like the one on the website.
- Implement a pink noise function which uses your value noise function.
- Use the pink noise function, together with the framework for making images I gave you in `pygamecolors.py`, to make some cool pictures.

  Try to be creative! Make marble, dirt, clouds, landscapes, something interesting!
- Write modular, well-documented code. Some of you are new at Python, so I don't expect objects/etc. However, decomposing the main algorithm into intelligible pieces is mandatory.
- Create a `main.py` folder (it can be your entire program, if you like), which, when run, will open a pygame window and create your most interesting image. This will save me time grading and trying to figure out the parameters I need to call your function, etc.
- Zip your code and best images together (don't use tar or anything else–I will be writing scripts to unzip and then run `main.py`) and submit to Canvas by the due date.