The goal of this first assignment is to get everything ready for the rest of the course. This includes

1. installing the latest shipped image on the BeagleBone
2. setting up a host computer with Linux for kernel development
3. gathering all the needed SD cards, cables, etc.
4. installing git on your host
5. signing up for the two beagle Google groups (See [Working With Open Source](http://elinux.org/EBC_Working_With_Open_Source))
6. writing a simple Etch-a-sketch program

# Etch-a-sketch

For part 6 you are to write a simple Etch-a-sketch[1] program. The classic Etch-a-sketch has two knobs and a screen. The knobs control the *x* and *y* position of a pen on the screen. Your simple Etch-a-sketch will take an input that tells the pen to move up, down, left, right or clear (shake?). Your display is simply a grid of characters that show where the pen has been.

0 1 2 3 4 5 6 7

0: x x x x

1: x x

2: x x x x

3: x x

4: x x x x

5: x x x x

6: x x

7: x x x x

My example shows an 8 by 8 grid. Make yours able to do any size.

Use Python, it’s already on the Bone. I suggest using version 3.

[1] <http://en.wikipedia.org/wiki/Etch_A_Sketch>

Challenge: Try using [ncurses](https://en.wikipedia.org/wiki/Ncurses).

1. Be sure your git repo is here[1], or I can't grade it.
2. Make me a collaborator on your repo, that way I can push comments back to you. My git ID is MarkAYoder.
3. If you code needs additional things to be loaded, put the commands in a file called **install.sh**. For example, tell me how to load **pygames** if you are using it.
4. Include #!/usr/bin/env python (or whatever language you are using) at the start of your project and chmod +x it so it will execute from the command line.
5. Note compiler flags when needed.
6. Consider having your etch-a-sketch print out the instructions when it starts.
7. Be sure your name is on [2] and [3]. Don't just edit the web page, use git.

[1] See the Embedded Repos page on Moodle.

[2]

<https://github.com/MarkAYoder/gitLearn/blob/master/helloWorld.c>

[3] <https://github.com/MarkAYoder/gitLearnFork/blob/master/helloWorld.c>

## What to turn in

1. Create a repository on <https://github.com/>

2. List your repository on the Embedded Repos link on Moodle.

3. Make a subdirectory in your github repository called **hw01**.

4. Put all your files in the directory, include a **ReadMe.md** that explains which of the 6 items above you have done, and what your code for item 6 does and how to use it.

5. Document your code.