Setting up the SEDS Capstone Raspberry Pi

1. Login as default user
   a. username: pi
   b. password raspberry

2. Create “temp” directory in “/mnt” for mounting other drives
   a. **pi: $** sudo mkdir /mnt/temp

3. Insert flash drive, download and unzip tarball with all necessary folders (capstone_files.tar.gz) to temporary location of your choosing
   a. **pi: $** sudo mount /dev/sda1 /mnt/temp
   b. **pi: $** cp /mnt/temp/capstone_files_raspbian.tar.gz <destination>
   c. **pi: $** tar -xzf capstone_files_raspbian.tar.gz

4. Create user “seds”, add to same groups as default user, and set password as “raspberrypi” (or whatever you want)
   a. **pi: $** sudo su
   b. **root: #** bash create_user.sh
   c. **root: #** exit

5. Logout of default user account
   a. **pi: $** logout

6. Login as created user “seds”

7. Move or copy tarball and related files into “seds” user’s home directory

8. Update Wi-Fi name and password

9. In “Raspberry Pi Configuration”, change the following:
   a. Under Interfaces tab
      1. SSH → Enable
      2. Serial Port → Enable (for GPS)
      3. Serial Console → Disable
      4. Remote GPIO → Enable

10. Disable default user account, set SSD to automount, setup GPS, install LimeSuite, and update the LimeSuite udev-rules
    a. **seds: $** sudo su
    b. **root: #** bash capstone_setup.sh
    c. **root: #** exit

11. Install SoapySDR API and other miscellaneous programs, and create permanent aliases for switching between boot to GUI and terminal
    a. **seds: $** bash misc_setup.sh

12. Set up Ethernet connection
    a. suggested → 192.168.<unused subnet #>.<device #>/<netmask>

1. The first 2 #s in the IP address and the netmask # **MUST** match between the PC and the Pi for this to work.
2. The first 2 #s given above are just a suggestion, but they don't specifically need to be those.

13. Set up VNC connection. This will use the same IP address as SSH, except it will be specified to use port 1.
    a. **seds: $** sudo su
    b. **root: #** bash vnc-setup.sh

14. Set boot to terminal either through Systems tab in "Raspberry Pi Configuration" or through the terminal.
    a. **seds: $** set-boot-to-terminal

15. The Raspberry Pi should now have all required software installed. Reboot to complete setup.
    a. **seds: $** sudo reboot