

# Week 4 Answers

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Devin Comba My VM was not responding, so I used Visual Studio Code on my own computer.

1. Empty fields in each file and also the files differed in the size of the empty fields.
2. Cleaning
  - find: `;`, replace: `\t`
  - find: `\t\t`, replace: `\tNaN\t`
  - find: `( |\t)$`, replace: ````
  - find: `,` replace: `_` on line 1
  - find: `^(NaN\t){16}\n`, replace: ````
  - find: `(?:\.\d)\d\d`, replace: ````
3. To put the header line in the file: `grep MH_Time \StrdIn_Twater_090611-090828_corr.d.csv > 2009Measurements.txt` To put the data from all three data files into the new file: `grep -rh "^2009.*" . >> \2009Measurements.txt`
4. Used the same type of command as in 3 to add header to the new file. To add lines w/o Nan: `sed -r 's/^\.NaN//' \StrdIn_Twater_090829-091012_corr.d.csv >> ..\completeLakeTemps.txt` for each data file
5. To capture and put the 1st of the month measurements into new file: `grep -rh '[0-9][0-9][0-9][0-9]-[0-9][0-9]-01' >> ..\SemiMonthlyLakeTemps.txt` To capture and put 15th of the month measurements into new file: `grep -rh '[0-9][0-9][0-9][0-9]-[0-9][0-9]-15' >> ..\SemiMonthlyLakeTemps.txt`
6. To get measurements from midnight to 6am: `grep -rh '^.....0[0-6]' . > NightTimeLakeTemps.txt` To get measurements from 8pm to midnight: `grep -rh '^.....2[0-4]' . >> NightTimeLakeTemps.txt`
7. `awk '{print $3}' ./ * >> depth_0.1m.txt`