Exercises for git and GitHub

Exercises

1. Go to GitHub and create an account, if you have not yet done so.
2. Run the file `install_R_packages_gitwebinar.R` from the `/setup` folder, which will check that you have git installed on your system, and will download all of the required **R** packages.

git_for_r presentation

3. Fork the GitHub repository `CentreForHydrology/git_for_R.git` to your account.

Note that you could clone directly from `https://github.com/CentreForHydrology/git_for_R.git`, but it is better practice for collaboration to work from your own copy of the repo.

4. Make a local copy of the presentation repository by cloning your repository. (`https://github.com/<username>/git_for_r`).
5. Delete the file `this_file_is_junk.txt` from the local repo. It is inside the `/exercises` folder.
6. Make a change to the `README.md` file in the main folder, such as adding a fun note to this file.
7. Commit the changes to your local repo; be sure to stage the changes first.
8. Push the changes to your local repo. Check that the README.md page on your github repo online has been updated.
9. At this stage, if you were happy with your changes, you might submit a pull request. This would 'request' the managers of the original repo to consider pulling your updates into their repo.

CSHS-hydRology package

10. Fork the GitHub repository `CSHS-CWRA/CSHShydRology` to your account.
11. Create a local version of the `CSHShydRology` package on your own computer by creating a new project in RStudio.
12. Build the package. Check to see that it builds properly. For more in-depth checking, use the **Check** command.
13. Create a branch called `testing` for the CSHShydRology repo on your computer. You may need to revert changes made to files before switching or creating branches.
14. Create a file in the /R folder called "this_is_junk.txt" with a fun message.
15. Commit the changes to the local repo and push the commit to GitHub. Do this without building the package for now (noting that this is in line with bad practices).
16. Check the `testing` branch. Does the package build properly? Change the junk file so that the testing branch will build.
17. Change back to the `DanMoore_spatial` branch and note the differences in files in the /R folder.