```
set username
                             git config --global user.name "<username>"
set email
                             git config --global user.email <email-address>
make git case insensitive
                             git config --global core.ignorecase true
clone existing github repo
                             git clone git@github.com:<account-name>/<repo-name>.git
checkout and track a remote
                             git branch -f <local-name> <remote-name>/<branch-name>
initialize local repo
                             git init
add a remote (use 'origin' for remote name)
                             git remote add <remote-name> git@github.com:<account-name>/<repo-name>.git
add file to index
                             qit add <file>
add all files not in index
                             ait add .
commit all changes to index git commit -a
push local to remote & track git push -u <remote-name> <branch-name>
push to remote branch
                             git push origin <br/>branch-name>
update latest from remote
                             git remote update
pull branch (fetch and merge) git pull origin <br/> branch-name>
switch branch
                             git checkout <branch-name>
clean everything (ignored, dirs, files)
                             git clean -xdf
delete remote branch
                             git push origin :<br/>branch-name>
delete local branch
                             git branch -d <branch-name>
create branch
                             git checkout -b <new-branch-name> <branch-to-branch-off>
                             git branch -m <old-branch-name> <new-branch-name>
rename branch
unstage committed changes
                             ait reset HEAD
unstage previous n commits
                             git reset HEAD~n
view staged changes
                             git status
lose changes to working copy git reset --hard
stash changes
                             git stash
pop stashed changes
                             git stash pop
who changed file contents
                             qit blame <file>
view remote branches
                             ait branch -r
revert changes to file
                             git checkout -- <file>
                             git checkout HEAD <file>
                             git checkout -m <file>
undo conflict resolution
un-stage single file commit git reset HEAD <file>
```

```
cherry pick from a local branch (e.g. if committed to a wrong branch)
                             //get the sha of the commit
                             git checkout <correct-branch-name>
                             git cherry-pick <sha>
                             git push origin <correct-branch-name>
                             git checkout <incorrect-branch-name>
                             git reset -hard HEAD^
                             git push origin <incorrect-branch-name>
interactive add
                             git add -i
                             2 - update index with changes to existing files
                             4 - add untracked files according to selection
visualize index
                             git gui
visualize log/history
                             gitk
pull historical version of branch into another (e.g. known good integration into master)
                             git checkout <sha>
                                                                     //now in detached head state
                             git checkout -b <br/>branch-name>
                                                                     //branch based on <sha>
                             ait checkout master
                                                                     //for example
                             git pull <temporary-branch-name>
                             git push origin master
                             git branch -d <temporary-branch-name>
add submodule
                             git submodule add git@github.com:<account-name>/<repo-name>.git <location>
commit as amend to the previous commit
                             git commit -a --amend
                             //then "i" for interactive ":w" to save, and ":q" to quit
force local to track remote git branch set-upstream origin/branch-to-track
differences between branches git diff --name-status master..branch
list commits to branch
                             git log
check the result of a merge (before commit)
                             git pull <remote-name> //bring yourself up-to-date
                             git merge <br/> <br/>branch-name> --no-commit --no-ff
prune knowledge of deleted remotes
                             git remote prune <remote-name> //e.g. 'origin'
compress history archive
                             git gc
find in files
                             git grep -n <string-to-find>
tag a branch
                             git tag -a <branch-name> -m "<message>"
"chop the head off a branch"
NOTE: this adds a commit with the tree at the state it was at the given sha. It doesn't actually chop the
head off.
                             //id the sha of the last good commit
                             git reset <sha>
                                                           //reset index to the desired tree
                             git reset --soft HEAD@{1}
                                                           //move branch pointer to previous HEAD
                             git commit -m "<message>"
                                                           //e.g. "revert to <sha>"
                                                           //reset working copy to reflect new commit
                             git reset --hard
add color
                             git config color.ui true
add alias
                             git config --global alias.myalias '<actual-command>'
```