

GIT BASIC

git init <directory>	Create empty Git repo in specified directory. Run with no arguments to initialize the current directory as a git repository
git clone <repo>	Clone repo located at onto local machine. Original repo can be located on the local filesystem or on a remote machine via HTTP or SSH.
git config user.name <name>	Define author name to be used for all commits in current repo. Devs commonly use --global flag to set config options for current user.
git add <directory>	Stage all changes in <directory> for the next commit. Replace <directory> with a <file> to change a specific file.
git commit -m "<message>"	Commit the staged snapshot, but instead of launching a text editor, use <message> as the commit message.
git status	List which files are staged, unstaged, and untracked
git log	Display the entire commit history using the default format. For customization see additional options
git diff	Show unstaged changes between your index and working directory

UNDOING CHANGES

git revert <commit>	Create new commit that undoes all of the changes made in <commit>, then apply it to the current branch.
git reset <file>	Remove <file> from the staging area, but leave the working directory unchanged. This unstages a file without overwriting any changes
git clean -n	Shows which files would be removed from working directory. Use the -f flag in place of the -n flag to execute the clean.

GIT DIFF

git diff HEAD	Show difference between working directory and last commit.
git diff --cached	Show difference between staged changes and last commit

REWRITING GIT HISTORY

git commit --amend	Replace the last commit with the staged changes and last commit combined. Use with nothing staged to edit the last commit's message.
git rebase <base>	Rebase the current branch onto <base>. <base> can be a commit ID, branch name, a tag, or a relative reference to HEAD.
git reflog	Show a log of changes to the local repository's HEAD. Add --relative-date flag to show date info or --all to show all refs.

GIT BRANCHES

git branch	List all of the branches in your repo. Add a <branch> argument to create a new branch with the name <branch>
git checkout -b <branch>	Create and check out a new branch named <branch>. Drop the -b flag to checkout an existing branch.
git merge <branch>	Merge <branch> into the current branch.

REMOTE REPOSITORIES

git remote add <name> <url>	Create a new connection to a remote repo. After adding a remote, you can use <name> as a shortcut for <url> in other commands.
git fetch <remote> <branch>	Fetches a specific <branch>, from the repo. Leave off <branch> to fetch all remote refs.
git pull <remote>	Fetch the specified remote's copy of current branch and immediately merge it into the local copy.
git push <remote> <branch>	Push the branch to <remote>, along with necessary commits and objects. Creates named branch in the remote repo if it doesn't exist.

GIT CONFIG

git config --global user.name <name>	Define the author name to be used for all commits by the current user
git config --global user.email <email>	Define the author email to be used for all commits by the current user.
git config --global alias. <alias-name>	Create shortcut for a Git command. E.g. alias.glog "log --graph --oneline" will set "git glog" equivalent to "git log --graph --oneline."

<git-command>	
git config --system core.editor <editor>	Set text editor used by commands for all users on the machine. <editor> arg should be the command that launches the desired editor (e.g., vi).
git config --global --edit	Open the global configuration file in a text editor for manual editing
GIT LOG	
git log -<limit>	Limit number of commits by <limit>. E.g. "git log -5" will limit to 5 commits
git log --oneline	Condense each commit to a single line.
git log -p	Display the full diff of each commit.
git log --stat	Include which files were altered and the relative number of lines that were added or deleted from each of them.
git log --author= "<pattern>"	Search for commits by a particular author.
git log --grep="<pattern>"	Search for commits with a commit message that matches <pattern>
git log <since>..<until>	Show commits that occur between <since> and <until>. Args can be a commit ID, branch name, HEAD, or any other kind of revision reference.
git log -- <file>	Only display commits that have the specified file.
git log --graph --decorate	--graph flag draws a text based graph of commits on left side of commit msgs. --decorate adds names of branches or tags of commits shown.