**Tell Git who you are**

| **Description** | **Command** |
| --- | --- |
| Configure the author name. | git config --global user.name "<username>" |
| Configure the author email address. | git config --global user.email <email address> |

**Getting & Creating Projects**

| **Description** | **Command** |
| --- | --- |
| Initialize a local Git repository | git init |
| Create a local copy of a remote repository | git clone ssh://git@github.com/<username>/<repository-name>.git |

**Basic Snapshotting**

| **Description** | **Command** |
| --- | --- |
| Check status | git status |
| Add a file to the staging area | git add <file-name.txt> |
| Add all new and changed files to the staging area | git add -A or git add . |
| Commit changes | git commit -m "<commit message>" |
| Remove a file (or folder) | git rm -r <file-name.txt> |

**Inspection & Comparison**

| **Description** | **Command** |
| --- | --- |
| View changes | git log |
| View changes (detailed) | git log --summary |
| View changes in one line (briefly) | git log --oneline or git log --pretty=oneline or git log --pretty=short |

**Undo to previous file**

| **Description** | **Command** |
| --- | --- |
| List of all commit with commit id and commit message) | git log --oneline |
| Return to previous commit | git checkout<commit id> |
| Revert commit (undo one particular commit) | git revert <commit id> |
| Reset to previous commit (remove history of all commit after ) | git reset <commit id> |
| Stop a file being tracked | git rm --cached <file/folder> |
| Restore a file to a previous commit | git checkout <file/to/restore> |

**Branching & Merging**

| **Description** | **Command** |
| --- | --- |
| List branches (the asterisk denotes the current branch) | git branch |
| List all branches (local and remote) | git branch -a |
| Create a new branch | git branch <branch name> |
| Create a new branch and switch to it | git checkout -b <branch name> |
| Clone a remote branch and switch to it | git checkout -b <branch name> origin/<branch name> |
| Rename a local branch | git branch -m <old branch name> <new branch name> |
| Switch to a branch | git checkout <branch name> |
| Switch to the branch last checked out | git checkout - |
| Discard changes to a file | git checkout -- <file-name.txt> |
| Delete a branch | git branch -d <branch name> |
| Delete a remote branch | git push origin --delete <branch name> |
| Preview changes before merging | git diff <source branch> <target branch> |
| Merge a branch into the active branch | git merge <branch name> |
| Merge a branch into a target branch | git merge <source branch> <target branch> |
| Stash changes in a dirty working directory | git stash |
| Remove all stashed entries | git stash clear |

**Sharing & Updating Projects**

| **Description** | **Command** |
| --- | --- |
| Push a branch to your remote repository | git push origin <branch name> |
| Push changes to remote repository (and remember the branch) | git push -u origin <branch name> |
| Push changes to remote repository (remembered branch) | git push |
| Delete a remote branch | git push origin --delete <branch name> |
| Update local repository to the newest commit | git pull |
| Pull changes from remote repository | git pull origin <branch name> |
| Add a remote repository | git remote add origin ssh://git@github.com/<username>/<repository-name>.git |
| Set a repository's origin branch to SSH | git remote set-url origin ssh://git@github.com/<username>/<repository-name>.git |