

GitHub Basics

The following are basic commands and their usage for initial GitHub usage.
Basic Commands:

- git clone - Clone a repository into a new directory.
- git add - Add file contents to the index (adds file to index so changes are tracked).
- git commit - Record changes to the repository (these changes are local to the machine currently working on)
- git push - Update remote refs along with associated objects (uploads local commits to remote repository)
- git pull - Fetch from and integrate with another repository or a local branch (downloads from remote repository any changes that have happened since last push).

In the following examples username and repository are placeholders for the github username and remote repository that is being used. Command Usage in public repository:

```
$ git clone https://github.com/username/repository.git
remote: Counting objects: 4, done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 4
Unpacking objects: 100% (4/4), done.
Checking connectivity... done.

$ git add file1 file2 file3
$ git commit -m "Reason_for_commit"
1 file changed, 1 insertion(+)
create mode 100644 example

$ git push origin master
Username for 'https://github.com': username
Password for 'https://username@github.com':
Counting objects: 3, done.
Delta compression using up to 4 threads.
```

```
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 325 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/username/repository.git
70b8f72..38d3471  master -> master

$ git pull
Already up-to-date.
```

If there are commits that you do not have then something similar to the following will be displayed:

```
$ git pull
remote: Counting objects: 3, done.
remote: Compressing objects: 100% (2/2), done.
Unpacking objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
From https://github.com/username/repository
   38d3471..f6832db  master      -> origin/master
Updating 38d3471..f6832db
Fast-forward
 example2 | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 example2
```

Command Usage using ssh keys: