Git Week 1

Start

There are a few tools in the git folder that require explanation:

1. Awk, a programming language for text processing.
2. Bash, the git prompt.
3. B(un)zip2, a source package
4. Cat, is a tool used to view a file as it existed in a particular revision.
5. Curl, is used for transferring data with URL syntax.
6. Diff, can be used to compare and edit files between revisions.
7. Grep, is used to search for content.
8. Less, an experimental version control system.
9. Openssl, a toolkit for SSL and TLS
10. Perl, a programming language.
11. Tar, a program used to create, maintain, modify, and extract files that are archived in the tar format.
12. Vim, a text editor.

The .git folder contains 4 things:

1. Objects directory, is used for intitial storage of content.
2. Refs directory, saves user-created references.
3. HEAD file, shows the current branch.
4. INDEX file, contains a sorted list of path names with the permissions and the SHA1 of a blob object.

Add and commit

In git diff, the < sign means a removed string. The > sign means an added string. The letter a means added, d means deleted, and c means copied. When using diff -u, the – sign means that a string has been removed. The + sign means that a string has been added.

Possible states of a file in git are untracked, tracked, modified, and repo. Using git status -s, you can see which files have been altered. The exact alterations can be seen using git diff. In the git diff output, the red strings with a – sign in front of them are removed and the green strings with a + in front of them are added.