

HW 1

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1 Question 1: Git Commands

1.1 Details

1. Execute the command *git log* and find the two most recent commits. Then, execute the command *git diff hash-from-last-commit hash-from-two-commits-ago*. Observe the output. Describe in a few sentences what the command is doing.
2. Modify test.txt, then execute *git diff*. Observe the output. Describe in a few sentences what the command is doing.

1.2 Results

1. The command *git diff tag1 tag2* first determines what changes have occurred in my repository between the two supplied tags. Then, for each change within a file, displays results from a comparison test between the two files that have differences.

In figure 1, the noticed change is between versions of my hw1/README.md. A line by line comparison of these two files is then displayed. Lines prefixed with '-' indicate lines that have been removed from the latest version. Lines prefixed with '+' indicate lines that have been added since the last version. Lines without either of these, have not changed.

2. The command *git diff* when not provided tags to compare, compares the most recent local version with the most recent repository version. As with diff1.txt, line by line comparisons are made between each differing file between tags.

In figure 2, *git diff* noticed changes between test.txt on the local version and the repository version. The '+' indicates that the line "Adding a line" was added to the bottom of the test.txt file.

1.3 Figures

```
diff --git a/hw1/README.md b/hw1/README.md
index 4681a15..02aa232 100644
--- a/hw1/README.md
+++ b/hw1/README.md
@@ -2,7 +2,5 @@
### Author: Jacob Hurst
### Date: August 28th, 2018
* This subdirectory contains 2 subdirectories, code & report.
-* The code for this homework is located in the code subdirectory (hw1/code) and is
  documented in the appendix of the report.
+* Normally, the code for this homework would be located in the code subdirectory (h
  w1/code) and be documented in the appendix of the report, however, this first homewo
  rk only involves a report.
+* The report for this homework is located in the report subdirectory (hw/report).
-* To reproduce the results found in the report:
  1.
```

Figure 1: This figure displays output from git diff hash1 hash2.

```
diff --git a/hw1/test.txt b/hw1/test.txt
index 5634c85..5cad384 100644
--- a/hw1/test.txt
+++ b/hw1/test.txt
@@ -1,3 +1,4 @@
  Hello, World!
  I am Jacob Hurst.
  I am learning version control.
+Adding a line
```

Figure 2: This figure displays output from git diff.