

HW #1
Math/CS 471, Fall 2021

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1 Question:8 Part: 1

1.1 What:

Execute the command `git log` and paste the output.

1.2 How:

We typed in `git log` in the Terminal application (Mac) and copied and pasted the output below.

```
commit a528dc9784dd1ae578b8c79c5761e0fd21944063
Author: Michael Sands <sandsm@unm.com>
Date:   Wed Sep 1 11:34:32 2021 -0600
```

Committing README files.

```
commit 5c3caf9db092219fc2c6ad6eb0fba906059a5aa1
Author: Michael Sands <sandsm@unm.com>
Date:   Wed Sep 1 11:27:32 2021 -0600
```

renamed test.txt to hw1 dir.

```
commit 906d1086998ebc8d8c24e5a9139392099913fcc2
Author: Michael Sands <sandsm@unm.com>
Date:   Wed Sep 1 11:25:21 2021 -0600
```

Added two more lines to test.txt

1.3 Why:

This allows us to briefly view a list of all the commits / changes to our code. The hashtags are the "ID" numbers after the "commit" in each commit.

2 Question: 8 Part: 2

2.1 What:

Execute the command `git diff` and comment on its output.

2.2 How:

We typed "git diff" into the terminal and copied and pasted the result below.

```
diff --git a/README.txt b/README.txt
new file mode 100644
index 0000000..a5fd2f8
--- /dev/null
+++ b/README.txt
@@ -0,0 +1,6 @@
+++++
+README file for Math 471 Repository for Michael Sands and
+John Tran, Fall 2021
+++++
+- The homework report is in the hw1 directory
+
+
diff --git a/hw1/README.txt b/hw1/README.txt
new file mode 100644
index 0000000..2b164cc
--- /dev/null
+++ b/hw1/README.txt
@@ -0,0 +1,5 @@
+++++
+README file for Homework 1, Math 471, Fall 2021, Michael Sands
+and John Tran
+++++
+- The homework report is in the directory
+hw1/report and is called homework1.pdf.
diff --git a/test.txt b/hw1/test.txt
similarity index 100%
rename from test.txt
rename to hw1/test.txt
```

2.3 Why:

This command finds the differences between the two commits. Once the differences are identified, they are printed onto the screen. In this case, the difference is the creation of the README.txt files.

3 Question: 8 Part: 3

3.1 What:

Modify test.txt without adding our committing it in git. Comment on the output of git diff.

3.2 How:

We added the line, "This is a new line.", to test.txt. The result of git diff is shown below.

```
diff --git a/hw1/test.txt b/hw1/test.txt
index b7aed73..5c9b1c5 100644
--- a/hw1/test.txt
+++ b/hw1/test.txt
@@ -1,3 +1,4 @@
Hello World
I am Michael Sands (and John Tran)
I am learning version control.
+This is a new line.
```

3.3 Why:

This diff command finds the difference between the current uncommitted files and the last set of committed files. In this case, the new line is the only difference, so it is printed out by the git diff command.

4 Question: 8 Part: 4

The test.txt file has been reverted and no changes are apparent using git status.