## Exercise 1: Create your first Commit.

```
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status
On branch master
nothing to commit, working tree clean
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline
7bedb2c (HEAD -> master) Initial Message
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ ls -la
total 8
drwxr-xr-x@ 3 arjunpoudel  staff    96 Apr  7 14:08 .
drwxr-xr-x@ 4 arjunpoudel  staff   128 Apr  7 14:10 ..
-rw-r--r--@ 1 arjunpoudel  staff   149 Apr  7 14:09 index.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ 
```

## Exercise 2: Commit only one file.

```
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ atom index.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ atom about.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ ls -la
total 16
drwxr-xr-x@ 4 arjunpoudel  staff   128 Apr  7 14:15 .
drwxr-xr-x@ 4 arjunpoudel  staff   128 Apr  7 14:15 ..
-rw-r--r--@ 1 arjunpoudel  staff   167 Apr  7 14:14 about.html
-rw-r--r--@ 1 arjunpoudel  staff   176 Apr  7 14:14 index.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add index.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   index.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        about.html

arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit -m "File ind
ex.html added"
[master 591e852] File index.html added
 1 file changed, 1 insertion(+), 1 deletion(-)
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline
591e852 (HEAD -> master) File index.html added
7bedb2c Initial Message
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ 
```

Exercise 3: Modify last commit.

```
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log
commit c224a26545192a06891fdf5677d43dbdd5a12253 (HEAD -> master)
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 16:58:50 2021 -0400

    adding index.html

commit 591e8527cbea8dbc207c4e668502fd02a9b3918a
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 14:16:05 2021 -0400

    File index.html added

commit 7bedb2c2cce32f2be1eb82c10ba864ca66cef01e
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 14:10:00 2021 -0400

    Initial Message
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ atom about.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add about.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit --amend -m "
Adding index.html and about.html"
[master 5f116fc] Adding index.html and about.html
 Date: Wed Apr 7 16:58:50 2021 -0400
 3 files changed, 31 insertions(+)
 create mode 100644 git_assignments/Exercise_3/about.html
 create mode 100644 git_assignments/Exercise_3/index.html
 create mode 100644 git_assignments/about.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log
commit 5f116fcb69da564493ad36a1ba74f3cf18f63612 (HEAD -> master)
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 16:58:50 2021 -0400

    Adding index.html and about.html

commit 591e8527cbea8dbc207c4e668502fd02a9b3918a
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 14:16:05 2021 -0400

    File index.html added

commit 7bedb2c2cce32f2be1eb82c10ba864ca66cef01e
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 14:10:00 2021 -0400

    Initial Message
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$
```

Exercise 4: Create git ignore file

```
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ nano .gitignore
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ cat .gitignore
#ignores files with listed extensions#
*.exe
*.o
*.jar

#ignores listed directory #
/libraries
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$
```

Exercise 5: Save your work with stash.

```
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ echo "Hello" >> hello.t]
xt
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ echo "NewFile added" >>]
file1.txt
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ echo "file2 added" >> f]
ile2.txt
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ ls                     ]
about.html      file1.txt       file2.txt       hello.txt       index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add file1.txt file2]
.txt
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status            ]
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   file1.txt
        new file:   file2.txt

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    Exercise_3/about.html
        deleted:    Exercise_3/index.html

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore
        hello.txt

[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git stash             ]
Saved working directory and index state WIP on master: 5f116fc Adding index.html and about.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status            ]
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore
        hello.txt

nothing added to commit but untracked files present (use "git add" to track)
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git stash list        ]
stash@{0}: WIP on master: 5f116fc Adding index.html and about.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git stash -u          ]
Saved working directory and index state WIP on master: 5f116fc Adding index.html and about.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status            ]
On branch master
nothing to commit, working tree clean
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ 
```

## Exercise 6: Reset Previous Commit Keeping changes. (Soft Reset)

```
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline          ]
b016370 (HEAD -> master) .gitignore and hello.txt file added
7928d45 file1 and file2 added
5f116fc Adding index.html and about.html
591e852 File index.html added
7bedb2c Initial Message
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git reset --soft 591e8527]
cbea8dbc207c4e668502fd02a9b3918a
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline          ]
591e852 (HEAD -> master) File index.html added
7bedb2c Initial Message
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status               ]
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   .gitignore
        new file:   about.html
        new file:   file1.txt
        new file:   file2.txt
        new file:   hello.txt

arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$
```

## Exercise 7: Reset Previous Commit (Hard Reset).

```
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline          ]
0f5a30a (HEAD -> master) file2.txt and hello.txt file added
46a69ad file about.html and file1.html added
8e5e2a3 .gitignore file added
591e852 File index.html added
7bedb2c Initial Message
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git reset --hard 8e5e2a39]
03c56ad40bd1d5f8f08267470b7c0f52
HEAD is now at 8e5e2a3 .gitignore file added
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline          ]
8e5e2a3 (HEAD -> master) .gitignore file added
591e852 File index.html added
7bedb2c Initial Message
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$
```

Exercise 8: Merge branch (No Conflicts).

```
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log --oneline
591e852 (HEAD -> master) File index.html added
7bedb2c Initial Message
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git checkout -b my-feature
Switched to a new branch 'my-feature'
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ atom about-us.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add about-us.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit -m "File about-us.html
 added"
[my-feature 0d382bc] File about-us.html added
 1 file changed, 10 insertions(+)
 create mode 100644 git_assignments/about-us.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git checkout main
error: pathspec 'main' did not match any file(s) known to git
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git show-branch -a
! [master] File index.html added
 * [my-feature] File about-us.html added
--
 * [my-feature] File about-us.html added
+* [master] File index.html added
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git checkout master
Switched to branch 'master'
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git merge my-feature
Updating 591e852..0d382bc
Fast-forward
 git_assignments/about-us.html | 10 ++++++++++
 1 file changed, 10 insertions(+)
 create mode 100644 git_assignments/about-us.html
arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$
```

Exercise 9: Merge branch (Conflicts).

```
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ nano index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit -m "File index.html ad]
ded"
[master 0d97794] File index.html added
 1 file changed, 1 insertion(+), 1 deletion(-)
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git checkout my-feature
 Switched to branch 'my-feature'
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ nano about-us.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ nano index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add .
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit -m "about-us.html adde]
d and index.html updated"
On branch my-feature
nothing to commit, working tree clean
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git log
commit d5c5df03f765de85547f01123e3a60be34efd054 (HEAD -> my-feature)
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Thu Apr 8 18:52:15 2021 -0400

    File about-us.html added and index.html updated

commit 0d382bcd84ff1d996135f761bd55a6a78cfbf019
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Thu Apr 8 18:40:46 2021 -0400

    File about-us.html added

commit 591e8527cbea8dbc207c4e668502fd02a9b3918a
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 14:16:05 2021 -0400

    File index.html added

commit 7bedb2c2cce32f2be1eb82c10ba864ca66cef01e
Author: Arjunkp5016 <poudelarjunk@outlook.com>
Date:   Wed Apr 7 14:10:00 2021 -0400

    Initial Message
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git checkout master
 Switched to branch 'master'
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ nano index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit -m "changes made to in]
dex.html on master"
[master 3174eda] changes made to index.html on master
 1 file changed, 2 insertions(+), 1 deletion(-)
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git merge my-feature
Auto-merging git_assignments/index.html
CONFLICT (content): Merge conflict in git_assignments/index.html
Automatic merge failed; fix conflicts and then commit the result.
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ nano index.html
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git add .
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git commit -m "resolved merge con]
flict"
[master 1ae05c5] resolved merge conflict
[arjunpoudel@Arjuns-MBP:~/Documents/consultadd_training/innovationwithpython_arjun/git_assignments$ git status
On branch master
nothing to commit, working tree clean
```