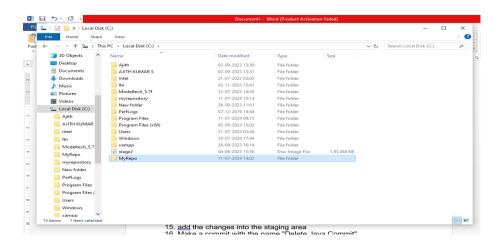
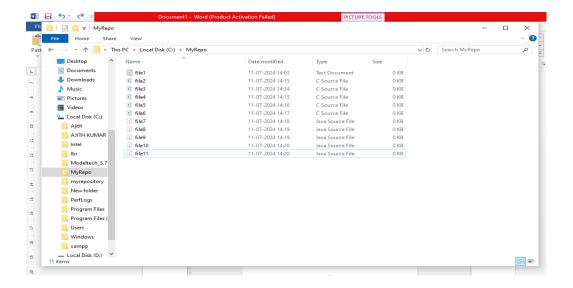
A. KEERTHANA 73152113053 cecskeerthanaacse25@gmail.com

- 1. Create a local git repo with the name "MyRepo".
- 2. create one .txt file, five .c files and five .java files in the working area.
- 3. Verify the git status
- 4. Add only the .txt into the staging area
- 5. verify the git status
- 6. Make a commit with the name "TXT Commit"
- 7. Add all .c files into the staging area
- 8. verify the git status
- 9. Make a commit with the name "C Commit"
- 10 .Add all .java files into the staging area
- 11. verify the git status
- 12. Make a commit with the name "Java Commit"
- 13. Delete all .java files from working area
- 14. Now see the status
- 15. add the changes into the staging area
- 16. Make a commit with the name "Delete Java Commit"
- 17. display all commit details





```
↑ GitCMD

C:\Users\home>d:

D:\xcd MyRepository

D:\MyRepository*git init
Initialized empty Git repository in D:\MyRepository/.git/

D:\MyRepository>git status

On branch master

No commits yet

Untracked files:

(use "git add {file>..." to include in what will be committed)

file10.java
file2.c

file3.c

file4.c

file5.c

file6.c

file6.c

file6.c

file6.c

file7.java

file8.java

nothing added to commit but untracked files present (use "git add" to track)

D:\MyRepository>

13. Delete all java files from working area
```

```
nothing added to commit but untracked files present (use "git add" to track)

D:\MyRepository>git add file1.txt
```

```
No commits yet

Changes to be committed:
    (use "git rm --cached <file>..." to unstage)
        en effile: file1.txt

Untracked files:
```

```
↑ Git CMD

File9.java

nothing added to commit but untracked files present (use "git add" to track)

D:\MyKepository>git add file1.txt

D:\MyKepository>git status
On branch master

No commits yet

Changes to be committed:
    (use "git m --cached <file>..." to unstage)
    new file: file1.txt

Untracked files:
    (use "git add <file>..." to include in what will be committed)
    ile10.java
    file1.java
    file2.c
    file4.c
    file5.c
    file6.c
    file6.c
    file6.c
    file6.c
    file6.s
    file6.java
    file8.java
    file8.java
```

```
D:\MyRepository>git commit -m"txt Commit"
[master (root-commit) adcd960] txt Commit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file1.txt
D:\MyRepository>
```

```
D:\WyRepository>git status
On branch master
Changes to be committed:

(use "git restore --staged <file>..." to unstage)

"len file file3.c

new file: file3.c

new file: file4.c

new file: file5.c

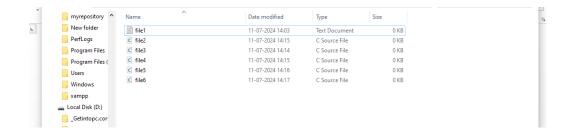
new file: file5.c

new file: file5.c

new file: file5.c
```

```
D:\MyRepository>git commit -m"c"
[master 1c91a45] c
5 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file3.c
create mode 100644 file3.c
create mode 100644 file4.c
create mode 100644 file5.c
create mode 100644 file5.c
create mode 100644 file5.c
create mode 100644 file5.c
```

```
\MyRepository>git add *.java
\MyRepository>git status
branch master
```



```
Pick CMD

| New File: | file7.java | file8.java | file8.
```

D:\MyRepository>git add .

```
D:\MyRepository>git add .

D:\MyRepository>git commit -m "dalete java commit"

[master 2cd643a] dalete java commit

S files changed, 0 insertions(+), 0 deletions(-)
delete mode 100644 file10. java
delete mode 100644 file11. java
delete mode 100644 file1. java
delete mode 100644 file3. java
delete mode 100644 file5. java
delete mode 100644 file8. java
D:\MyRepository>
```

```
delete mode 100644 file8.java delete mode 100644 file8.java delete mode 100644 file9.java

D:\Wykepository>git log
commit 2cd643a1816c4de04772e06491827a6609falbce (HEAD -> master)
Author: keerthana akeerthana.a2019@gmail.com>
Date: Thu Jul 11 15:09:23 2024 +0530

dalete java commit

commit 1088bcac8879ce4c37df0ddd9f83c48c22b0c49f
Author: keerthana akeerthana.a2019@gmail.com>
Date: Thu Jul 11 14:52:34 2024 +0530

java

commit 1c91a459f0a0c22cbeb6cf0c12dec0ed3abe4fc6
Author: keerthana akeerthana.a2019@gmail.com>
Date: Thu Jul 11 14:49:35 2024 +0530

c

commit adcd9601d7389fe5ldc4c381f8d7e3962b9f70b8
Author: keerthana akeerthana.a2019@gmail.com>
Date: Thu Jul 11 14:41:41 2024 +0530

txt Commit

D:\Wykepository>_
```

A.KEERTHANA 73152113053 cecskeerthanaa25@gmail.com

1. Create a new directory and change into it.

```
ers>cd ..
kdir git2
d git2
```

2. Use the init command to create a Git repository in that directory.



5. Look at the output of the status command; the README you created should appear as an untracked file.

```
C:\git2>git status
On branch master
No commits yet
Untracked files:
    (use "git add <file>..." to include in what will be committed)

IEADME.md

nothing added to commit but untracked files present (use "git add" to track)
```

6. Use the add command to add the new file to the staging area. Again, look at the output of the status command.

7. Now use the commit command to commit the contents of the staging area.

```
C:\git2>git commit -m"README Commit"
[master (root-commit) 50412e6] README Commit
1 file changed. 0 insertions(+), 0 deletions(-)
create mode 100644 README.md
```

8. Create a src directory and add a couple of files to it.

C:\git2>mkdir src

9. Use the add command, but name the directory, not the individual files. Use the status

command. See how both files have been staged. Commit them.

```
C:\git>git status
On branch master
C:\git>git commit -m"src Commit"
On branch master
C:\git2>git commit -m"src Commit"

C:\git2>git commit -m"SrcCommit"

C:\git2>git add src
C:\git2>git commit -m"SrcCommit"

[master a31735] SrcCommit "
[master a31735] or commit -m"srcCommit"

c:\git2>git commit -m"SrcCommit -m"srcCo
```

10. Make a change to one of the files. Use the diff command to view the details of the change.

```
C:\git2>git diff
diff --git a/src/file1.txt b/src/file1.txt
index e690629.5a925bf 100644
--- a/src/file1.txt
++ b/src/file1.txt

30 -0,0 +1 60
-keerthana
\ No newline at end of file
```

11. Next, add the changed file, and notice how it moves to the staging area in the status

output. Also observe that the diff command you did before using add now gives no output.

Why not? What do you have to do to see a diff of the things in the staging area? (Hint:

review the slides if you can't remember.)

12. Now – without committing – make another change to the same file you changed in step 10.

Look at the status output, and the diff output. Notice how you can have both staged and

unstaged changes, even when you're talking about a single file. Observe the difference when

you use the add command to stage the latest round of changes. Finally, commit them. You

should now have started to get a feel for the staging area.

13. Use the log command in order to see all of the commits you made so far.

```
→ Git CMD

C:\git2>git commit -m "text Commit"

[master bbbb2a3] text Commit

1 file changed, 1 insertion(+)

C:\git2>git log

commit bbbb2a307ecbd7ca17f9bad17e1292502cd653d6 (HEAD -> master)

Author: keerthana -keerthana-a20198gmail.com>

Date: Fri Jul 12 15:15:10 2024 +0530

text Commit

a317ba5daf741653b79589e6d8277273f0f34a5d

Author: keerthana -keerthana-a20198gmail.com>

Date: Fri Jul 12 14:33:58 2024 +0530

SrcCommit

commit 50412e656ed0a4f30807e96430833455a3f58b51

Author: keerthana -keerthana-a20198gmail.com>

Date: Fri Jul 12 14:30:16 2024 +0530

README Commit
```

14. Use the show command to look at an individual commit. How many characters of the commit identifier can you get away with typing at a minimum?

```
README Commit

C:\git2>git show bbbb2a307ecbd7ca17f9bad17e1292502cd653d6
fatal: ambiguous argument 'bbbb2a307ecbd7ca17f9bad17e1292502cd653d6': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...] -- [<file>...]'

C:\git2>

C
```

15. Make a couple more commits, at least one of which should add an extra file.

```
diff --git a/src/file1.txt b/src/file1.txt
new file mode 100644
index 0000000..e69de29
diff --git a/src/file2.txt b/src/file2.txt
new file mode 100644
index 0000000..e69de29
C:\git2>git add file3.txt
fatal: pathspec 'file3.txt' did not match any files
C:\git2>git add src/file3.txt
C:\git2>git commit -m "TextCommit"
[master cal4efd] TextCommit
C:\git2>git commit -m "TextCommit"
C:\git2>gt commit -m "TextCommit"
```

- 1. Run the status command. Notice how it tells you what branch you are in.
- 2. Use the branch command to create a new branch.
- 3. Use the checkout command to switch to it.
- 4. Make a couple of commits in the branch perhaps adding a new file and/or editing existing

ones.

5. Use the log command to see the latest commits. The two you just made should be at the

top of the list.

- 6. Use the checkout command to switch back to the master branch. Run log again. Notice
- your commits don't show up now. Check the files also they should have their original

contents.

- 7. Use the checkout command to switch back to your branch. Use gitk to take a look at the
- commit graph; notice it's linear.
- 8. Now checkout the master branch again. Use the merge command to merge your branch in
- to it. Look for information about it having been a fast-forward merge. Look at git log, and
- see that there is no merge commit. Take a look in gitk and see how the DAG is linear.
- 9. Switch back to your branch. Make a couple more commits.
- 10. Switch back to master. Make a commit there, which should edit a different file from the
- ones you touched in your branch to be sure there is no conflict.
- 11. Now merge your branch again. (Aside: you don't need to do anything to inform Git that you

only want to merge things added since your previous merge. Due to the way Git works, that

kind of issue simply does not come up, unlike in early versions of Subversion.)

12. Look at git log. Notice that there is a merge commit. Also look in gitk. Notice the DAG

now shows how things forked, and then were joined up again by a merge commit.

```
C:\Users\Admin>cd ..

C:\Users>cd ..

C:\Users>cd ..

C:\Sitsgit status
On branch master
Changes not staged for commit:
(use "git add -file..." to update what will be committed)
(use "git restore -file...." to discard changes in working directory)
modified: src/File.txt

no changes added to commit (use "git add" and/or "git commit -a")

C:\Git>
```

```
no changes added to commit (use "git add" and/or "git commit -a")
C:\Git>git branch Branch-1
```

```
C:\Git>git branch Branch-1
C:\Git>git checkout Branch-1
Switched to branch 'Branch-1'
W src/File1.txt
```

```
C:\Git>git add File.txt
C:\Git>git add File.txt
C:\Git>git add File1.txt
C:\Git>git commit "Text file commit"
error: pathspec 'Text file commit' did not match any file(s) known to git
C:\Git>git commit -m "Text file"
[Branch-1 escess7] Text file
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 File.txt
create mode 100644 File1.txt
```

```
C:\Git>git\git\log
commit e\ses\ef{e}\frac{1}{2}\text{9e54a2cc4d70e892bd7fd43db2af0d69b} (HEAD -> Branch-1)
Author: Gurupriya \text{2}\text{gurupriya2728\text{8}\text{gmail.com}}.

Text file
commit cc42d3462213df409f6d40af093c69806f5fb2bd (master)
Author: Gurupriya \text{cgurupriya2728\text{8}\text{gmail.com}}.

File 2 commit
commit a2e72d566d14aa5646ddee8527750437b33b6868
Author: Gurupriya \text{cgurupriya2728\text{gmail.com}}.

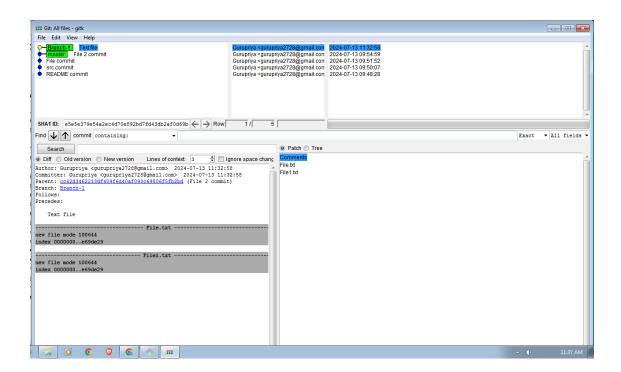
Date: Sat Jul 13 09:51:52 2024 +0530

File commit
commit 83977d275c97de9e872efb044a8e7ebb0cd8ae16
Author: Gurupriya \text{cgurupriya2728\text{gmail.com}}.

Date: Sat Jul 13 09:50:07 2024 +0530

src commit
...skipping...
```

```
README commit
C:\Git>git checkout Branch-1
Switched to branch 'Branch-1'
C:\Git>
```



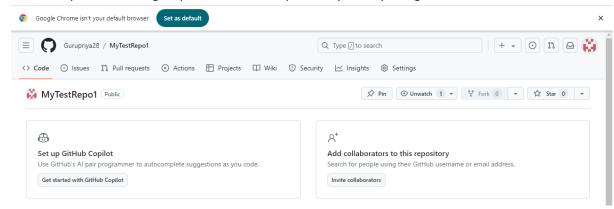
```
C:\Git>qit checkout Branch-1
Switched to branch 'Branch-1'
```

```
C:\Git>git merge Branch-1
Updating cc42d34..e5e5e37
Fast-Forward of
File.txt | 0
File.txt | 0
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 File.txt
```

Exercise 3

Main Task

1. First, one person in the group should create a public repository using their GitHub account.



2. This same person should then follow the instructions from GitHub to add a remote, and then push their repository. Do not forget the –u flag, as suggested by GitHub!

```
C:\Git>git add *.txt

C:\Git>git commit -m "Text File commit"

[master (root-commit) 6blc07c] Text File commit

2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 File.txt
create mode 100644 File.txt

C:\Git>git remote add origin https://github.com/Gurupriya28/MyTestRepol.git
error: remote origin already exists.

C:\Git>git push -u origin master
Enumerating objects: 3, done.
Counting objects: 30% (3/3), done.

Counting objects: 100% (3/3), done.

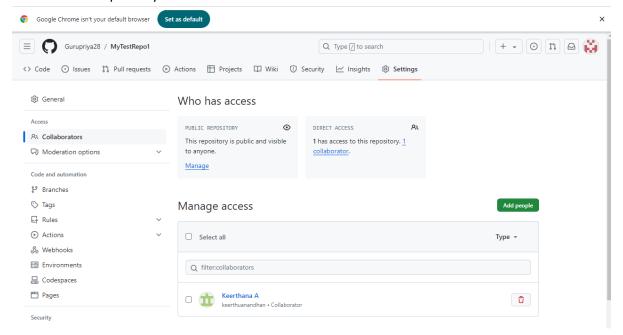
Delta compression using up to 4 threads
Compression objects: 100% (3/2), done.
Writing objects: 100% (3/3), 224 bytes | 224.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

Total 15 (delta 0), reused 0 (delta 0), pack-reused 0

To https://github.com/Gurupriya28/MyTestRepol.git

* [new hranch] master -s master
branch | master | set up to track 'origin/master'.
```

3. All of the other members of the group should then be added as collaborators, so they can commit to the repository also.



4. Next, everyone else in the group should clone the repository from GitHub. Verify that the context of the repository is what is expected.

```
D:\>cd TestRepos | Colone https://github.com/Gurupriya28/MyTestRepol | Coloning into MyTestRepol | Coloning Coloning
```

5. One of the group members who just cloned should now make a local commit, then push it. Everyone should verify that when they pull, that commit is added to their local repository (use git log to check for it).

```
D:\TestRepo>git add file2.txt

D:\TestRepo>git commit -m "file commit"
[master (root-commit) d23a282] file commit

1 file changed, 0 insertions(-), 0 deletions(-)
create mode 100644 TestRepo/file2.txt

D:\TestRepo>git pull
D:\TestRepo
D:\TestRepo>git pull
D:\Te
```

6. Look at each other's git log output. Notice how the SHA-1 is the same for a given commit across every copy of the repository. Why is this important?

```
D:\TestRepo>git log
commit d23a28245afc46fbf83ale84c56f54c32d8e7ef4 (HEAD -> master)
Author: keerthana <-keerthana a.20198gmail.com>
Date: Mon Jul 15 14:38:27 2024 +0530
file commit
```

7. Two members of the group should now make a commit locally, and race to push it. To keep things simple, be sure to edit different files. What happens to the runner-up?

```
C:\Gitsgit push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compression using up to 4 threads
Compression objects: 100% (2/2), done.
Writing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 224 bytes | 224.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Gurupriya28/MyTestRepol.git
* [new branch] master -> master
branch 'master' set up to track 'origin/master'.
C:\Gitsgit log
Commit 6blc0/c60lbfc35ba758bdab35646dc0f99ce5f7 (HEAD -> master, origin/master)
Author: Gurupriya <gurupriya27288gmail.com>
Date: Mon Jul 15 14:01:31 2024 +0530

Text File commit
```

8. The runner-up should now pull. As a group, look at the output of the command. Additionally, look at the git log, and notice that there is a merge commit. You may also wish to view the DAG in gitk.

```
D:\TestReposgit pull
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Counting objects: 100% (2/2), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
Uppacking objects: 100% (3/3), 204 bytes | 25.00 kiB/s, done.
From https://github.com/Gurupriya28/MyrestRepol
* [new branch] master -> origin/master
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

git pull <remote> <br/>dranch>
f you wish to set tracking information for this branch you can do so with:
git branch --set-upstream-to=origin/dbranch> master
```

9. Repeat the last two steps a couple of times, to practice.

```
D:\Git2>git add file12.txt
D:\Git2>git commit -m "file12"
[branch-2 ad4e267] file12
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file12.txt
```

D:\Git2>git add file13.txt D:\Git2>git commit -m "file13" [master 4ea2282] file13 1 file changed, O insertions(+), O deletions(-) create mode 100644 file13.txt

Exercise 4

1. Make a commit, and make a silly typo in the commit message.

```
C:\Users\home>c:
C:\Users\home>c:
C:\Users\home>cd ..
C:\Users>cd ..
C:\>cd Git
C:\Git>git add File5.txt
C:\Git>git commit -m "commitmn"
[master e07e98a] commitmn
```

2. Use the --amend flag to enable you to fix the commit message.

```
C:\Git>git commit --amend -m "Commit 5"
[master ad0d45b] Commit 5
Date: Mon Jul 15 15:03:29 2024 +0530
```

3. Look at the log and notice how the mistake is magically gone.

```
c:\Git-git log
commit ad\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Gammatds\Dispars\Dispars\Dispars\Dispars\Gammatds\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\Dispars\
```

4. Now make a commit where you make a typo in one of the files. Once again, use --amend to magic away your problems.

```
C:\Git>git add File6.txt

C:\Git>git commit -m "fle 6 cmmit"
[master adb4583] fle 6 cmmit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 File6.txt

C:\Git>git commit --amend -m "File 6 commit"
[master 4ce/050] File 6 commit
Date: Mon Jul 15 15:08:34 2024 +0530
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 File6.txt
```

5. Create a branch. Make a commit.

```
C:\Git>git branch Branch-1
C:\Git>git checkout Branch-1'
Switched to branch 'Branch-1'
C:\Git>git add File7.txt
C:\Git>git commit -m "File 7 commit"
[Branch-1 92777dd] File 7 commit
1 File changed, 0 insertions(+), 0 deletions(-)
create mode 100644 File7.txt
```

6. Now switch back to your master branch. Make a (non-conflicting) commit there also.

```
C:\Git>git checkout master

Switched to branch 'master'

Switched to branch 'master'

Your branch is ahead of 'origin/master' by 3 commits.

(use "git push" to publish your local commits)

C:\Git>git add File7.txt
did not match any files

C:\Git>git add File7.txt

C:\Git>git commit -m "File7"

[master e2263c4] File7

1 file changed, 0 insertions(+), 0 deletions(-)

create mode 100644 File7.txt
```

7. Now switch back to your branch.

```
C:\Git>git checkout Branch-1
Switched to branch 'Branch-1'
```

8. Use the rebase command in your branch. Look at the DAG in gitk, and note that you have the commit from the master branch, but no merge commit.

```
c:\Gitsgit rebase master warning: skipped previously applied commit 92777dd hint: use --reapply-cherry-picks to include skipped commits hint: bes --reapply-cherry-picks to include skipped commits hint: Disable this message with "git config advice.skippedCherryPicks false" Successfully rebased and updated refs/heads/Branch-1.
```

9. Make one more commit in your branch.

```
C:\Git>git add File8.txt
C:\Git>git commit -m "File 8 commit"
[Branch-1 dedIOaf] File 8 commit
1 file changed, 0 insertions(-), 0 deletions(-)
create mode 100644 File8.txt
```

10. Return to master. Merge your branch. Notice how, thanks to the rebase, this is a fastforward merge.