

Experiment.NO: 3

Aim:

Demonstration of various git operations on local and remote repositories using git cheat-sheet.

Theory:

1. **git init** : Initializes a new Git repository in the current directory.
2. **git clone <repository_url>** : Copies a remote repository to your local machine.
3. **git add <file>** : Adds a specific file to the staging area for the next commit.
4. **git commit -m "message"** : Creates a new commit with the staged changes and a descriptive message.
5. **git status** : Displays the current state of the repository, showing modified and untracked files.
6. **git diff** : Shows the differences between the working directory and the last commit.
7. **git pull** : Fetches changes from a remote repository and merges them into the current branch.
8. **git push** : Sends local commits to a remote repository to update it.
9. **git branch** : Lists all branches in the repository.
10. **git checkout <branch>** : Switches to a different branch or commit.
11. **git merge <branch>** : Combines changes from a different branch into the current branch.
12. **git rebase <branch>** : Applies the changes from a different branch on top of the current branch.
13. **git log** : Displays a chronological list of commits in the repository.
14. **git reset <file>** : Unstages a file, removing it from the staging area.
15. **git stash** : Temporarily stores changes that are not ready to be committed.
16. **git remote -v** : Lists remote repositories associated with your local repository.
17. **git fetch** : Retrieves changes from a remote repository without merging them.
18. **git config --global user.name "Your Name"** : Sets your global username for commits.
19. **git config --global user.email "youremail@example.com"** : Sets your global email for commits.
20. **git rm <file>** : Removes a file from the working directory and stages the deletion.

GitBash :

```
Soham@LAPTOP-C97ED763 MINGW64 /
$ git --version
git version 2.41.0.windows.3

Soham@LAPTOP-C97ED763 MINGW64 /
$ mkdir sohamwebpage

Soham@LAPTOP-C97ED763 MINGW64 /
$ cd sohamwebpage

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage
$ git init
Initialized empty Git repository in
C:/Users/Soham/Downloads/PortableGit/sohamwebpage/.git/
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ ls -a
./ ../ .git/

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git config --global user.email sohamj1929@gmail.com

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git config --global user.name sohamj

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git config --global core.editor gedit

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano meet.txt
```

```

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git add meet.txt
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git status
On branch master
No commits yet
Changes to be committed: (use "git rm --cached <file>..." to unstage)
new file:   meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git add meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   meet.txt
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:   meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -am "Changes made to meet.txt"
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
[master (root-commit) 5aee653] Changes made to meet.txt
 1 file changed, 1 insertion(+)
create mode 100644 meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log
commit 5aee653e9ababf478ef5f10e1a3bc7a155fc039b (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:30:21 2023 +0530
    Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano karan.txt soham.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ ls -a
./ ../ .git/ soham.txt karan.txt meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git status
On branch master
Untracked files: (use "git add <file>..." to include in what will be committed)
soham.txt      karan.txt
nothing added to commit but untracked files present (use "git add" to track)
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -am "Two files added karan.txt and soham.txt"
[master ce815d5] Two files added karan.txt and soham.txt
 2 files changed, 3 insertions(+)
create mode 100644 soham.txt create
mode 100644 karan.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log
commit ce815d514640c3bc51700d467f60290bc879f212 (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:34:35 2023 +0530    Two
files added karan.txt and soham.txt
commit 5aee653e9ababf478ef5f10e1a3bc7a155fc039b
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:30:21 2023 +0530
    Changes made to meet.txt

```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git rm --cached karan.txt
rm 'karan.txt'
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    deleted:   karan.txt
Untracked files:
  (use "git add <file>..." to include in what will be committed)
karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ rm karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ ls
soham.txt  meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -am "Deleted file karan.txt"
[master de76112] Deleted file karan.txt
1 file changed, 2 deletions(-) delete
mode 100644 karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log
commit de761127c0bb81d3a836d95adf4ad152483bee07 (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:39:58 2023 +0530
Deleted file karan.txt
commit ce815d514640c3bc51700d467f60290bc879f212
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:34:35 2023 +0530      Two
files added karan.txt and soham.txt commit
5aee653e9ababf478ef5f10e1a3bc7a155fc039b
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:30:21 2023 +0530
Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout ce815d5 karan.txt
Updated 1 path from 2231239
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
new file:   karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -am "restored karan.txt"
[master 9f8544b] restored karan.txt
1 file changed, 2 insertions(+)
create mode 100644 karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ ls
soham.txt  karan.txt  meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git status
On branch master
nothing to commit, working tree clean
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log
commit 9f8544b33cedcd12a12923b419ac63799743eba4 (HEAD -> master)
```

```
Author: sohamj <sohamj1929@gmail.com> Date:
Wed Aug 16 20:42:29 2023 +0530      restored
karan.txt
commit de761127c0bb81d3a836d95adf4ad152483bee07
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:39:58 2023 +0530
Deleted file karan.txt
commit ce815d514640c3bc51700d467f60290bc879f212
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:34:35 2023 +0530
    Two files added karan.txt and soham.txt commit
5aee653e9ababf478ef5f10e1a3bc7a155fc039b
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:30:21 2023 +0530
    Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
9f8544b (HEAD -> master) restored karan.txt de76112
Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout de76112
Note: switching to 'de76112'.
HEAD is now at de76112 Deleted file karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage ((de76112...))
$ ls
soham.txt  meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage ((de76112...))
$ git log
commit de761127c0bb81d3a836d95adf4ad152483bee07 (HEAD)
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:39:58 2023 +0530
Deleted file karan.txt
commit ce815d514640c3bc51700d467f60290bc879f212
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:34:35 2023 +0530      Two
files added karan.txt and soham.txt commit
5aee653e9ababf478ef5f10e1a3bc7a155fc039b
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:30:21 2023 +0530
Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage ((de76112...))
$ git checkout master
Previous HEAD position was de76112 Deleted file karan.txt
Switched to branch 'master'
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
9f8544b (HEAD -> master) restored karan.txt de76112
Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git reset --hard de76112
HEAD is now at de76112 Deleted file karan.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log
commit de761127c0bb81d3a836d95adf4ad152483bee07 (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:39:58 2023 +0530
Deleted file karan.txt
commit ce815d514640c3bc51700d467f60290bc879f212
Author: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 20:34:35 2023 +0530      Two
files added karan.txt and soham.txt commit
5aee653e9ababf478ef5f10e1a3bc7a155fc039b
Author: sohamj <sohamj1929@gmail.com>
```

Date: Wed Aug 16 20:30:21 2023 +0530
Changes made to meet.txt

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout master
Already on 'master'
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano esha.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git add esha.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -am "Adding esha.txt"
[master 63e176a] Adding esha.txt
1 file changed, 1 insertion(+)
create mode 100644 esha.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log
commit 63e176a313f41c9e32227dcba480678a90f5476f (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com>
Date: Wed Aug 16 20:50:48 2023 +0530
Adding esha.txt
commit de761127c0bb81d3a836d95adf4ad152483bee07
Author: sohamj <sohamj1929@gmail.com>
Date: Wed Aug 16 20:39:58 2023 +0530
Deleted file karan.txt
commit ce815d514640c3bc51700d467f60290bc879f212
Author: sohamj <sohamj1929@gmail.com>
Date: Wed Aug 16 20:34:35 2023 +0530    Two
files added karan.txt and soham.txt commit
5aee653e9ababf478ef5f10e1a3bc7a155fc039b
Author: sohamj <sohamj1929@gmail.com>
Date: Wed Aug 16 20:30:21 2023 +0530
Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano meet.txt esha.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git 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:   esha.txt          modified:   meet.txt
no changes added to commit (use "git add" and/or "git commit -a")
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git diff
warning: in the working copy of 'esha.txt', LF will be replaced by CRLF the next time Git
touches it
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
diff --git a/esha.txt b/esha.txt index
8bc13b8..fd7fb4c 100644
--- a/esha.txt
+++ b/esha.txt
@@ -1,1 @@
-Esha Pal
+Esha Jaiprakash Pal diff --git
a/meet.txt b/meet.txt index
220352c..727d648 100644
--- a/meet.txt
+++ b/meet.txt
@@ -1,1 @@
-Meet Sisodiya
+Meet Kamlesh Sisodiya
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git diff meet.txt
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
```

```

diff --git a/meet.txt b/meet.txt index
220352c..727d648 100644
--- a/meet.txt
+++ b/meet.txt
@@ -1,1 @@
-Meet Sisodiya
+Meet Kamlesh Sisodiya

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git add esha.txt
warning: in the working copy of 'esha.txt', LF will be replaced by CRLF the next time
Git touches it

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git diff --staged
diff --git a/esha.txt b/esha.txt index
8bc13b8..fd7fb4c 100644
--- a/esha.txt
+++ b/esha.txt
@@ -1,1 @@
-Esha Pal
+Esha Jaiprakash Pal

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
63e176a (HEAD -> master) Adding esha.txt de76112
Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git diff ce815d5
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
diff --git a/esha.txt b/esha.txt
new file mode 100644 index
0000000..fd7fb4c
--- /dev/null
+++ b/esha.txt
@@ -0,0 +1 @@ +Esha
Jaiprakash Pal
diff --git a/karan.txt b/karan.txt
deleted file mode 100644 index
47a5e2f..0000000
--- a/karan.txt
+++ /dev/null
@@ -1,2 +0,0 @@ -Karan
Shewale
diff --git a/meet.txt b/meet.txt index
220352c..727d648 100644
--- a/meet.txt
+++ b/meet.txt
@@ -1,1 @@
-Meet Sisodiya
+Meet Kamlesh Sisodiya

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -m "added colours"
[master a1329ef] added colours
1 file changed, 1 insertion(+), 1 deletion(-)

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
a1329ef (HEAD -> master) added colours
63e176a Adding esha.txt de76112
Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git diff HEAD HEAD~ diff --git
a/esha.txt b/esha.txt index
fd7fb4c..8bc13b8 100644
--- a/esha.txt
+++ b/esha.txt

```



```

@@ -1 +1 @@
-Esha Jaiprakash Pal
+Esha Pal

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git show
commit a1329ef2011559227e2ba336e39361ce7fa899c2 (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com> Date:
Wed Aug 16 20:57:35 2023 +0530    added
colours
diff --git a/esha.txt b/esha.txt index
8bc13b8..fd7fb4c 100644
--- a/esha.txt
+++ b/esha.txt
@@ -1 +1 @@
-Esha Pal
+Esha Jaiprakash Pal

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
a1329ef (HEAD -> master) added colours
63e176a Adding esha.txt de76112
Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git blame meet.txt
00000000 (Not Committed Yet 2023-08-16 20:59:44 +0530 1) Meet Kamlesh Sisodiya
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git blame esha.txt
a1329ef2 (sohamj 2023-08-16 20:57:35 +0530 1) Esha Jaiprakash Pal

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git reflog
a1329ef (HEAD -> master) HEAD@{0}: commit: added colours
63e176a HEAD@{1}: commit: Adding esha.txt
de76112 HEAD@{2}: checkout: moving from master to master de76112
HEAD@{3}: reset: moving to de76112
9f8544b HEAD@{4}: checkout: moving from de761127c0bb81d36d95adf4ad152483bee07 to master
de76112 HEAD@{5}: checkout: moving from master to de76112
9f8544b HEAD@{6}: commit: restored karan.txt de76112
HEAD@{7}: commit: Deleted file karan.txt
ce815d5 HEAD@{8}: commit: Two files added karan.txt and soham.txt
5aee653 HEAD@{9}: commit (initial): Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git show HEAD
commit a1329ef2011559227e2ba336e39361ce7fa899c2 (HEAD -> master)
Author: sohamj <sohamj1929@gmail.com> Date:
Wed Aug 16 20:57:35 2023 +0530    added
colours

diff --git a/esha.txt b/esha.txt index
8bc13b8..fd7fb4c 100644
--- a/esha.txt
+++ b/esha.txt
@@ -1 +1 @@
-Esha Pal
+Esha Jaiprakash Pal

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git tag v1.1

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git commit -am "added content in meet.txt"
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
[master 311c6a2] added content in meet.txt
1 file changed, 4 insertions(+), 1 deletion(-)

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)

```

```
$ git tag -a v2.2 -m "my version 2.2"
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git tag
v1.1 v2.2
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git show v2.2 tag
v2.2
```

```
Tagger: sohamj <sohamj1929@gmail.com>
Date:   Wed Aug 16 21:03:16 2023 +0530 my
version 2.2
```

```
commit 311c6a281cbe51076371222dd6efe18efabb2287 (HEAD -> master, tag: v2.2)
Author: sohamj <sohamj1929@gmail.com> Date:
Wed Aug 16 21:02:43 2023 +0530    added
content in meet.txt
```

```
diff --git a/meet.txt b/meet.txt
index 220352c..cff2d40 100644
--- a/meet.txt
+++ b/meet.txt
@@ -1,4 @@
-Meet Sisodiya
+Meet Kamlesh Sisodiya
+TE IT A
+VPPCOE
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git tag v1.2 -a 63e176a -m "my version 1.2"
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git tag
v1.1 v1.2
v2.2
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline --decorate
311c6a2 (HEAD -> master, tag: v2.2) added content in meet.txt
a1329ef (tag: v1.1) added colours 63e176a (tag: v1.2) Adding
esha.txt de76112 Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git tag -d v1.2
Deleted tag 'v1.2' (was 63edc5a)
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git tag
v1.1 v2.2
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
311c6a2 (HEAD -> master, tag: v2.2) added content in meet.txt a1329ef
(tag: v1.1) added colours
63e176a Adding esha.txt de76112
Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git branch
* master
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git branch new-chapter
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git branch *
master    new-
chapter
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout new-chapter
Switched to branch 'new-chapter'
```



```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
```

```
$ nano payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
```

```
$ git add payal.txt
```

```
warning: in the working copy of 'payal.txt', LF will be replaced by CRLF the next time  
Git touches it
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
```

```
$ git commit -m "adding payal.txt file in new-chapter branch"
```

```
[new-chapter e7756bc] adding payal.txt file in new-chapter branch
```

```
1 file changed, 1 insertion(+)
```

```
create mode 100644 payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
```

```
$ git log --oneline
```

```
e7756bc (HEAD -> new-chapter) adding payal.txt file in new-chapter branch
```

```
311c6a2 (tag: v2.2, master) added content in meet.txt
```

```
a1329ef (tag: v1.1) added colours
```

```
63e176a Adding esha.txt de76112
```

```
Deleted file karan.txt
```

```
ce815d5 Two files added karan.txt and soham.txt
```

```
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
```

```
$ git checkout master
```

```
Switched to branch 'master'
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git log --oneline
```

```
311c6a2 (HEAD -> master, tag: v2.2) added content in meet.txt
```

```
a1329ef (tag: v1.1) added colours 63e176a Adding esha.txt
```

```
de76112 Deleted file karan.txt
```

```
ce815d5 Two files added karan.txt and soham.txt
```

```
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ ls -a
```

```
./ ../ .git/ soham.txt esha.txt meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ nano payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git status
```

```
On branch master
```

```
Untracked
```

```
files:
```

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

```
payal.txt
```

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

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git add payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git status
```

```
On branch master
```

```
Changes to be committed:
```

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

```
new file:   payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git checkout master
```

```
Already on 'master'
```

```
A       payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git checkout --force master
```

```
Already on 'master'
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git checkout new-chapter
```

```
Switched to branch 'new-chapter'
```

```

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
$ nano payal.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
$ git branch chapter-two

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (new-chapter)
$ git checkout chapter-two
Switched to branch 'chapter-two'
M      payal.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git status
On branch chapter-two
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:   payal.txt
no changes added to commit (use "git add" and/or "git commit -a")
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git add payal.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git add meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout chapter-two
Switched to branch 'chapter-two'

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git log --oneline
5034f1c (HEAD -> chapter-two) meet.txt and payal.txt added in chapter-two branch
e7756bc adding payal.txt file in new-chapter branch 311c6a2 (tag: v2.2, master)
added content in meet.txt a1329ef (tag: v1.1) added colours 63e176a Adding
esha.txt de76112 Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git merge maste
Already up to date.

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git log --oneline
5034f1c (HEAD -> chapter-two) meet.txt and payal.txt added in chapter-two branch
e7756bc adding payal.txt file in new-chapter branch 311c6a2 (tag: v2.2, master)
added content in meet.txt a1329ef (tag: v1.1) added colours 63e176a Adding
esha.txt de76112 Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git checkout chapter-two
Already on 'chapter-two'

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git reset --hard HEAD~
HEAD is now at e7756bc adding payal.txt file in new-chapter branch

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git log --oneline
e7756bc (HEAD -> chapter-two) adding payal.txt file in new-chapter branch
311c6a2 (tag: v2.2, master) added content in meet.txt
a1329ef (tag: v1.1) added colours 63e176a Adding
esha.txt de76112 Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-two)
$ git checkout master
Switched to branch 'master'

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline

```

```
311c6a2 (HEAD -> master, tag: v2.2) added content in meet.txt
a1329ef (tag: v1.1) added colours 63e176a Adding esha.txt
de76112 Deleted file karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git merge chapter-two
```

```
Updating 311c6a2..e7756bc
```

```
Fast-forward payal.txt |
```

```
1 +
```

```
1 file changed, 1 insertion(+)
```

```
create mode 100644 payal.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git log --oneline
```

```
e7756bc (HEAD -> master, chapter-two) adding payal.txt file in new-chapter branch 311c6a2
```

```
(tag: v2.2) added content in meet.txt a1329ef (tag: v1.1) added colours
```

```
63e176a Adding esha.txt de76112
```

```
Deleted file karan.txt
```

```
ce815d5 Two files added karan.txt and soham.txt
```

```
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master) $
```

```
git merge chapter-two
```

```
Already up to date.
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git branch -d chapter-two
```

```
Deleted branch chapter-two (was e7756bc).
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git branch
```

```
* master
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git branch chapter-three
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git branch chapter-
```

```
three
```

```
* master
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
```

```
$ git checkout chapter-three
```

```
Switched to branch 'chapter-three'
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
```

```
$ nano yash.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
```

```
$ git add yash.txt
```

```
warning: in the working copy of 'yash.txt', LF will be replaced by CRLF the next time
```

```
Git touches it
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
```

```
$ git commit -am "yash.txt added in chapter-three branch"
```

```
[chapter-three 504f272] yash.txt added in chapter-three branch
```

```
1 file changed, 1 insertion(+)
```

```
create mode 100644 yash.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
```

```
$ git log --oneline
```

```
504f272 (HEAD -> chapter-three) yash.txt added in chapter-three branch e7756bc
```

```
(master) adding payal.txt file in new-chapter branch
```

```
311c6a2 (tag: v2.2) added content in meet.txt a1329ef
```

```
(tag: v1.1) added colours
```

```
63e176a Adding esha.txt de76112
```

```
Deleted file karan.txt
```

```
ce815d5 Two files added karan.txt and soham.txt
```

```
5aee653 Changes made to meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
```

```
$ ls
```

```
soham.txt esha.txt meet.txt payal.txt yash.txt
```

```

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ nano yash.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ git status
On branch chapter-three
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:   yash.txt
no changes added to commit (use "git add" and/or "git commit -a")

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ git checkout --force master
Switched to branch 'master'

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash save "stashed yash.txt"
No local changes to save

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout chapter-three
Switched to branch 'chapter-three'

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ git stash save "stashed yash.txt"
No local changes to save

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ nano yash.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ git stash save "stashed yash.txt"
Saved working directory and index state On chapter-three: stashed yash.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ git status
On branch chapter-three
nothing to commit, working tree clean

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (chapter-three)
$ git checkout master
Switched to branch 'master'

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git log --oneline
e7756bc (HEAD -> master) adding payal.txt file in new-chapter branch
311c6a2 (tag: v2.2) added content in meet.txt
a1329ef (tag: v1.1) added colours 63e176a
Adding esha.txt de76112 Deleted file
karan.txt
ce815d5 Two files added karan.txt and soham.txt
5aee653 Changes made to meet.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash list
stash@{0}: On chapter-three: stashed yash.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano yash.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash save "stashed yash.txt"
No local changes to save

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash list
stash@{0}: On chapter-three: stashed yash.txt

Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git diff stash@{0} diff --git
a/yash.txt b/yash.txt deleted
file mode 100644 index
c6114cd..0000000

```

```
--- a/yash.txt
+++ /dev/null
@@ -1,0,0 @@
-Yash Vishnu Maismale
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash list
stash@{0}: On chapter-three: stashed yash.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash drop stash@{0}
Dropped stash@{0} (7f0a10263e5e066a3069b9e165bd401a2eecba67)
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash list
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash pop
No stash entries found.
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano yash.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash save "stashed yash.txt"
No local changes to save
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano yash.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash pop
No stash entries found.
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash list
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano abhi.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git checkout master
Already on 'master'
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano esha.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash save "stashed esha.txt"
warning: in the working copy of 'esha.txt', LF will be replaced by CRLF the next time Git
touches it
Saved working directory and index state On master: stashed esha.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ nano meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash save "stashed meet.txt"
warning: in the working copy of 'meet.txt', LF will be replaced by CRLF the next time Git
touches it
Saved working directory and index state On master: stashed meet.txt
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash show
meet.txt | 1 +
1 file changed, 1 insertion(+)
```

```
Soham@LAPTOP-C97ED763 MINGW64 /sohamwebpage (master)
$ git stash show stash@{1}
esha.txt | 1 +
1 file changed, 1 insertion(+)
```

```
Soham@LAPTOP-C97ED763 MINGW64 ~
$ cd practical3
```

```

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ ls
README.md  hungry.py

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git add hungry.py

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ nano karan

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

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

nothing added to commit but untracked files present (use "git add" to track)
Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git add . warning: in the working copy of 'karan', LF will be replaced by CRLF the
next time Git touches it

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
new file:   karan

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git commit -m "gfdhs"
[main 11e782c] gfdhs
 1 file changed, 2 insertions(+)
 create mode 100644 karan

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main|MERGING)
$ git commit -m "hsufh"
[main b15e62c] hsufh

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git pull origin main
From https://github.com/SohamJ29/practical3
* branch      main      -> FETCH_HEAD
Already up to date.

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git branch
* main

Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)
$ git push origin main

```

```
Enumerating objects: 10, done.  
Counting objects: 100% (10/10), done.  
Delta compression using up to 12 threads  
Compressing objects: 100% (6/6), done.  
Writing objects: 100% (8/8), 795 bytes | 795.00 KiB/s, done.  
Total 8 (delta 1), reused 0 (delta 0), pack-reused 0  
remote: Resolving deltas: 100% (1/1), done. To  
https://github.com/SohamJ29/practical3.git  
ecc1a2e..b15e62c main -> main
```

```
Soham@LAPTOP-C97ED763 MINGW64 ~/practical3 (main)  
$ https://github.com/SohamJ29/practical3.githttps://github.com/SohamJ29/practical3.git
```

Conclusion:

Hence, we have performed various git operations on local and remote repository using git cheat-sheet.