

EXPERIMENT – 3

AIM - To Perform various GIT operations on local and Remote repositories using GIT Cheat-

Sheet

```
15L@203-06 MINGW64 ~/Desktop/shrey-git (master)
$ git config --global user.name "shrey"
15L@203-06 MINGW64 ~/Desktop/shrey-git (master)
$ git config --global user.email sshrey30.shah@gmail.com
15L@203-06 MINGW64 ~/Desktop/shrey-git (master) $
git config --global --list user.name=shrey
user.email=sshrey30.shah@gmail.com

15L@203-06 MINGW64 ~/Desktop/shrey-git (master)
$ mkdir git-demo-project
15L@203-06 MINGW64 ~/Desktop/shrey-git (master)
$ cd git-demo-project
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git init
Initialized empty Git repository in C:/Users/15L/Desktop/shrey-
git/gitdemoproject/.git/

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ ls -a
./ ../ .git/
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ rm -rf .git/
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ rm -rf .git
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ ls -al total 0 drwxr-xr-x 1 15L 197121 0
Jan 23 13:40 ./ drwxr-xr-x 1 15L 197121 0
Jan 23 13:39 ../

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git init
Initialized empty Git repository in C:/Users/15L/Desktop/shrey-
git/gitdemoproject/.git/

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master) $ git
add .

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git status
```

```
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)          new
file:   sample.txt
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git commit -m "first commit"
[master (root-commit) d489bcf] first commit 1 file
changed, 0 insertions(+), 0 deletions(-) create
mode 100644 sample.txt
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git status
On branch master Untracked
files:
  (use "git add <file>..." to include in what will be committed)  index.html
nothing added to commit but untracked files present (use "git add" to
track)
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master) $ git
add .
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)          new
file:   index.html
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git commit -am "express commit"
[master bef012b] express commit
1 file changed, 0 insertions(+), 0 deletions(-) create
mode 100644 index.html
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git status On branch master nothing to
commit, working tree clean 15L@203-06
MINGW64 ~/Desktop/shrey-git/git-demo-
project (master)
$ git log
commit bef012be210dc3856730420ce2228425d43e58f5 (HEAD -> master)
Author: shrey <sshrey30.shah@gmail.com> Date:
Tue Jan 23 13:43:06 2024 +0530      express
commit      commit
d489bcf61da3943db131c6d0274d9eac00737319
```

Author: shrey <sshrey30.shah@gmail.com>
Date: Tue Jan 23 13:41:06 2024 +0530
first
commit

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ nano index.html
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (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:   index.html
no changes added to commit (use "git add" and/or "git commit -
a")
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git log
commit bef012be210dc3856730420ce2228425d43e58f5 (HEAD -> master)
Author: shrey <sshrey30.shah@gmail.com> Date:
Tue Jan 23 13:43:06 2024 +0530      express
commit      commit
d489bcf61da3943db131c6d0274d9eac00737319
Author: shrey <sshrey30.shah@gmail.com>
Date: Tue Jan 23 13:41:06 2024 +0530
first
commit
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ touch teststatus
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (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:   index.html
```

```
Untracked files:
  (use "git add <file>..." to include in what will be committed)
no changes added to commit (use "git add" and/or "git commit -
a")
```

teststatus

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master) $
git checkout -- teststatus error: pathspec 'teststatus' did not
match any file(s) known to git
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```

$ git checkout --index.html error: unknown option
`index.html' usage: git checkout [<options>] <branch>
or: git checkout [<options>] [<branch>] -- <file>...
    -b <branch>          create and checkout a new branch
    -B <branch>          create/reset and checkout a branch
    -l                   create reflog for new branch
    --guess              second guess 'git checkout <no-such-branch>' (default)
    --overlay            use overlay mode (default)
    -q, --quiet          suppress progress reporting      --recurse-
submodules[=<checkout>]                                control recursive
updating of submodules
    --progress           force progress reporting
    -m, --merge          perform a 3-way merge with the new branch
    --conflict <style>   conflict style (merge, diff3, or zdiff3)
    -d, --detach         detach HEAD at named commit
-t, --track[=(direct|inherit)]
set branch tracking configuration
    -f, --force          force checkout (throw away local modifications)
    --orphan <new-branch>          new
unparented branch      --overwrite-ignore      update
ignored files (default)
    --ignore-other-worktrees          do not check if another
worktree is holding the given ref
    -2, --ours           checkout our version for unmerged files
    -3, --theirs         checkout their version for unmerged files
    -p, --patch          select hunks interactively
    --ignore-skip-worktree-bits          do not limit pathspecs to
sparse entries only
    --pathspec-from-file <file>          read
pathspec from file
    --pathspec-file-nul   with --pathspec-from-file, pathspec elements are separated
with NUL character

```

```

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)

```

```

$ git add index.html warning: in the working copy of 'index.html', LF will
be replaced by CRLF the next time Git touches it

```

```

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)

```

```

$ 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)      teststatus

```

```

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)

```

```

$ git add teststatus

```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        index.html      new file:
        teststatus
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git commit -am "express commit"
[master 298a0e6] express commit 2
files changed, 1 insertion(+)
create mode 100644 teststatus
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git status
On branch master
nothing to commit, working tree clean
15L@203-06 MINGW64 ~/Desktop/shreygit/git-demo-project (master)
```

```
$ git log
commit 298a0e6689dd8b9d98ebc4e5413441e244b1036d (HEAD -> master)
Author: shrey <sshrey30.shah@gmail.com> Date:
Tue Jan 23 13:48:37 2024 +0530      express
commit
commit
bef012be210dc3856730420ce2228425d43e58f5
Author: shrey <sshrey30.shah@gmail.com> Date:
Tue Jan 23 13:43:06 2024 +0530      express
commit
commit
d489bcf61da3943db131c6d0274d9eac00737319
Author: shrey <sshrey30.shah@gmail.com>
Date: Tue Jan 23 13:41:06 2024 +0530
first
commit
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git log --oneline
298a0e6 (HEAD -> master) express commit
bef012b express commit d489bcf first commit
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ git remote add origin https://github.com/shrey-tsec/SEPM.git
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ rm -rf ^C
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
$ rm -rf https://github.com/shrey-tsec/SEPM.git
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master) $
git remote add origin https://github.com/shrey-tsec/EXP3.git error:
remote origin already exists.
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git origin git: 'origin' is not a git command. See 'git --help'.
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git show origin fatal: ambiguous argument 'origin': unknown revision or path not in the working tree.
```

Use '--' to separate paths from revisions, like this:

```
'git <command> [<revision>...] -- [<file>...]'
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git remote show origin
```

```
* remote origin
```

```
Fetch URL: https://github.com/shrey-tsec/SEPM.git
```

```
Push URL: https://github.com/shrey-tsec/SEPM.git
```

```
HEAD branch: (unknown)
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git remote remove origin
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git remote show origin fatal: 'origin' does not appear to be a git repository fatal: Could not read from remote repository.
```

Please make sure you have the correct access rights and the repository exists.

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git remote add origin https://github.com/shrey-tsec/EXP3.git
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git remote show origin
```

```
* remote origin
```

```
Fetch URL: https://github.com/shrey-tsec/EXP3.git
```

```
Push URL: https://github.com/shrey-tsec/EXP3.git
```

```
HEAD branch: (unknown)
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (master)
```

```
$ git branch -M main
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (main)
```

```
$ git push -u origin main Enumerating objects:
```

```
8, done.
```

```
Counting objects: 100% (8/8), done.
```

```
Delta compression using up to 20 threads Compressing objects:
```

```
100% (5/5), done.
```

```
Writing objects: 100% (8/8), 691 bytes | 691.00 KiB/s, done.
```

```
Total 8 (delta 0), reused 0 (delta 0), pack-reused 0
```

```
To https://github.com/shrey-tsec/EXP3.git *
```

```
[new branch]      main -> main branch 'main'
```

```
set up to track 'origin/main'.
```

```
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (main)
```

```

$ git pull Already
up to date. 15L@203-
06 MINGW64
~/Desktop/shreygit/g
it-demoproject
(main)

$ git pull remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 957 bytes | 239.00 KiB/s, done.
From https://github.com/shrey-tsec/EXP3
   298a0e6..7242627  main       -> origin/main
Updating 298a0e6..7242627
Fast-forward  index.html
| 2 +-
   1 file changed, 1 insertion(+), 1 deletion(-)
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (main)
$ git log --oneline origin/main
7242627 (HEAD -> main, origin/main) Update index.html
298a0e6 express commit bef012b
express commit d489bcf first commit

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (main)
$ $ git fetch bash: $: command not found

15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (main)
$ git fetch
15L@203-06 MINGW64 ~/Desktop/shrey-git/git-demo-project (main)
$ git merge origin/main Already up
to date.

```

```

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project
$ ls
ISR0/  index.html  teststatus

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote add origin https://github.com/Adityadikonda/ISR0.git

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote show origin
* remote origin
  Fetch URL: https://github.com/Adityadikonda/ISR0.git
  Push URL: https://github.com/Adityadikonda/ISR0.git
  HEAD branch: main
  Remote branch:
    main new (next fetch will store in remotes/origin)

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git push -u origin master

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote add origin
usage: git remote add [<options>] <name> <url>

    -f, --fetch           fetch the remote branches
    --tags               import all tags and associated objects when fetching
                        or do not fetch any tag at all (--no-tags)
    -t, --track <branch> branch(es) to track
    -m, --master <branch> master branch
    --mirror[={push|fetch}]
                        set up remote as a mirror to push to or fetch from

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote rm origin

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git push -u origin master
fatal: 'origin' does not appear to be a git repository
fatal: could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git pull
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

```

```

15L0203-010 MINGW64 ~/git-dvcs/git-dem-project
$ git config --global user.name "Aditya"

15L0203-010 MINGW64 ~/git-dvcs (master)
$ git config --global user.email "adikonda8@gmail.com"

15L0203-010 MINGW64 ~/git-dvcs (master)
$ git config --global --list
color.ui=true
user.name=Aditya
user.email=adikonda8@gmail.com

15L0203-010 MINGW64 ~/git-dvcs (master)
$ mkdir git-demo-project
mkdir: cannot create directory 'git-demo-project': File exists.

15L0203-010 MINGW64 ~/git-dvcs (master)
$ rm git-demo-project
rm: cannot remove 'git-demo-project': Is a directory

15L0203-010 MINGW64 ~/git-dvcs (master)
$ rmdir git-demo-project
rmdir: failed to remove 'git-demo-project': Directory not empty

15L0203-010 MINGW64 ~/git-dvcs (master)
$ rmdir -f git-demo-project
rmdir: unknown option -- f
Try 'rmdir --help' for more information.

15L0203-010 MINGW64 ~/git-dvcs (master)
$ rmdir --help
Usage: rmdir [OPTION]... DIRECTORY...
Remove the DIRECTORY(ies), if they are empty.

    --ignore-fail-on-non-empty
                        ignore each failure that is solely because a directory
                        is non-empty
    -p, --parents       remove DIRECTORY and its ancestors; e.g., 'rmdir -p a/b/c' is
                        similar to 'rmdir a/b/c a/b a'
    -v, --verbose       output a diagnostic for every directory processed
    --help              display this help and exit
    --version            output version information and exit

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Report any translation bugs to <https://translationproject.org/team/>.
Full documentation <https://www.gnu.org/software/coreutils/rmdir>
or available locally via: info '(coreutils) rmdir invocation'

15L0203-010 MINGW64 ~/git-dvcs (master)
$ rm -rf git-demo-project

15L0203-010 MINGW64 ~/git-dvcs (master)

```



```

MINGW64 ~/Documents/15L/git-demos/git-dem-project
15L@203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git pull
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> <branch>

If you wish to set tracking information for this branch you can do so with:

git branch --set-upstream-to=<remote>/<branch> master

15L@203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git push -u origin master
fatal: 'origin' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

15L@203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote show origin
fatal: 'origin' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

15L@203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote add origin https://github.com/Adityadikonda/ISRO.git

15L@203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git remote show origin
* remote origin
Fetch URL: https://github.com/Adityadikonda/ISRO.git
Push URL: https://github.com/Adityadikonda/ISRO.git
HEAD branch: main
Remote branch:
main new (next fetch will store in remotes/origin)

15L@203-010 MINGW64 ~/git-dvcs/git-dem-project (master)
$ git pull
remote: Enumerating objects: 26, done.
remote: Counting objects: 100% (26/26), done.
remote: Compressing objects: 100% (25/25), done.
remote: Total 26 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (26/26), 461.85 KiB | 1.68 MiB/s, done.
From https://github.com/Adityadikonda/ISRO
* [new branch] main -> origin/main
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

```

CONCLUSION:

Thus, we have successfully studied and performed various GIT operations on local and Remote repositories using GIT Cheat-Sheet.