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Batch: T12

Roll no: 30

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/git-
demoproject/.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/git-
demoproject/.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)
        teststatus
 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 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)
modified:   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/shrey-
git/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/shrey-
git/git-demo-
project (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 (master)
$ ls
ISRO/  index.html  teststatus

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

15L0203-010 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)

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 (master)
$ 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)
```

CONCLUSION:

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