

```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git add arr.txt
warning: in the working copy of 'arr.txt', LF will be replaced by CRLF the next time Git touches it

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        deleted:    README.md
        new file:   arr.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        README.md
        Weekly_Problem/
        array.txt
        ary.txt
        git_demo/

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git commit -m "first commit"
[main 82700a0] first commit
2 files changed, 4 insertions(+), 1 deletion(-)
delete mode 100644 README.md
create mode 100644 arr.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git remote add origin https://github.com/nakulupadhyay/git_demo

```

git add arr.txt # Adds arr.txt to the staging area.

#git status # Displays the status of changes in the Git repository.

git commit -m "first commit" # Commits changes with a message

git remote add orgin <url> # Adds a remote repository named "orgin" (typo of "origin").

```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d
$ cd fullstack

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack
$ touch arr.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack
$ git --version
git version 2.50.1.windows.1

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack
$ ls
README.md  weekly_Problem/  arr.txt  array.txt  ary.txt  git_demo/

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack
$ git init
Initialized empty Git repository in D:/fullStack/.git/

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    deleted:    README.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    README.md
    weekly_Problem/
    arr.txt
    array.txt

```

# cd Full_Stack	# Navigates into the "Full_Stack" directory.
# touch arr.txt	# Creates a new empty file named arr.txt.
# git --version	# Shows the installed Git version
# git init	# Initializes a new Git repository in the current folder.

git status # Displays the status of changes in the Git repository.

```
import java.util.Scanner;
public class PalindromeChecker {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a word: ");
        String input = scanner.nextLine().toLowerCase();

        if (isPalindrome(input)) {
            System.out.println("It is a palindrome.");
        } else {
            System.out.println("Not a palindrome.");
        }

        scanner.close();
    }
    public static boolean isPalindrome(String str) {
        int left = 0, right = str.length() - 1;
        while (left < right) {
            if (str.charAt(left) != str.charAt(right)) return false;
            left++;
            right--;
        }
        return true;
    }
}
```

```
NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 ~ (master)
$ touch PalindromeChecker.java

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 ~ (master)
$ nano PalindromeChecker.java

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 ~ (master)
$ javac PalindromeChecker.java

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 ~ (master)
$ java PalindromeChecker
Enter a word: naman
It is a palindrome.
```

touch : to make an java file

#nano : to open the text editor

javac : to compile the java file

java : to run the java file

```
NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        README.md
        Studysnap/
        weekly_Problem/
        array.txt
        ary.txt
        git_demo/
        string1.txt
        string2.txt

nothing added to commit but untracked files present (use "git add" to track)
NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ cmp arr.txt string2.txt
arr.txt string2.txt differ: char 3, line 1
```

#git status # Shows the status of your working directory and staging area.

#cmp arr.txt string2.txt # Compares two files byte-by-byte

```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ head arr.txt
hello world
hello priyam
naman
jay

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ tail arr.txt
hello world
hello priyam
naman
jay

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ tail -r 3 -n arr.txt
tail: unknown option -- r
Try 'tail --help' for more information.

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git diff

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ diff arr.txt string2.txt
1,4c1,7
< hello world
< hello priyam
< naman
< jay
---
> hey
> hi
> how
> are
> you
> i
> am

```

head arr.txt: to show the few line from the top of the file

tail arr.txt : View last N lines

git diff → Shows unstaged changes between working dir and index

diff arr.txt string2.txt → Compares contents of two files line-by-line.

```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (demo4)
$ git switch demo3
Switched to branch 'demo3'

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (demo3)
$ git switch main
Switched to branch 'main'

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git log
commit 82700a0e70b1d95f3fe1612e4ebb91976974c0fa (HEAD -> main, origin/main, demo4, demo3)
Author: NAKUL UPADHYAY <nakulupadhyay815@gmail.com>
Date: Tue Aug 5 19:20:10 2025 +0530

    first commit

commit a43a102c5bc3b45cc3425fca73430f2fd25f28b8 (demo2, demo1, demo)
Author: nakulupadhyay <142798383+nakulupadhyay@users.noreply.github.com>
Date: Mon Aug 4 09:07:13 2025 +0530

    Initial commit

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ pwd
/d/fullstack

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$

```

git log # Shows commit history.

git switch main # Switches to branch main

pwd # Prints the current working directory

```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git checkout -b main
fatal: a branch named 'main' already exists

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git checkout -b demo4
Switched to a new branch 'demo4'

```

git checkout -b branch name → Creates and switches to branch name

```
NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git clone https://github.com/nakulupadhyay/git_demo
fatal: destination path 'git_demo' already exists and is not an empty directory.

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git clone https://github.com/nakulupadhyay/StudySnap
Cloning into 'StudySnap'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git branch
  demo
  demo1
  demo2
* main

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git branch demo
fatal: a branch named 'demo' already exists

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git branch demo3

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git branch
  demo
  demo1
  demo2
```

git clone <repo> → Clones GitHub repo again

git branch -> to show the branches

```
NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack/name (main)
$ rm name

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack/name (main)
$ ls

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack/name (main)
$ cd ..

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ cp string2.txt
cp: missing destination file operand after 'string2.txt'
Try 'cp --help' for more information.

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ cp string2.txt string1.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ ls
README.md  Weekly_Problem/  arr.txt  array.txt  ary.txt  git_demo/  name/  string1.txt  string2.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ chmod 444 arr.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ ls -l arr.txt
-r--r--r-- 1 JATIN UPADHYAY 197121 36 Aug  5 19:17 arr.txt
```

rm name → Deletes a file named name (error if it's a folder).

cd .. → Goes up one directory level.

cp string2.txt → (Incomplete) Missing destination file.

cp string2.txt string1.txt → Copies string2.txt as string1.txt.

chmod 444 arr.txt → Sets arr.txt to read-only for everyone.

Ls -l arr.txt -> to show the mod of file

```
NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ ls
README.md Weekly_Problem/ arr.txt array.txt ary.txt git_demo/ name/ string.txt string2.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ mv sting1.txt /d/name
mv: cannot stat 'sting1.txt': No such file or directory

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ mv sting.txt /d/name
mv: cannot stat 'sting.txt': No such file or directory

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ mv string.txt /d/name

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ ls
README.md Weekly_Problem/ arr.txt array.txt ary.txt git_demo/ name/ string2.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ cd name

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack/name (main)
$ ls

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack/name (main)
$ ls
name
```

mv string1.txt /d/name # Moves file to /d/name folder.

Ls -> to show the folder/files in the that particular floder

Cd -> change the current directory to the another directory


```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ ls
README.md  Weekly_Problem/  arr.txt  array.txt  ary.txt  git_demo/

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ mkdir name

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ ls
README.md  Weekly_Problem/  arr.txt  array.txt  ary.txt  git_demo/  name/

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ touch string.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ echo "hello world" > string.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ echo "hello world 2" >> string.txt

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ cat > string2.txt
hey
hi
how
are
you
i
am
fine
[2]+  Stopped                  cat > string2.txt

```

- ❓ mkdir name → Creates a directory named name.
- ❓ touch string.txt → Creates an empty file string.txt.
- ❓ echo "hello world" > string.txt → Writes to file (overwrites).
- ❓ echo "hello world 2" >> string.txt → Appends text to the file.
- ❓ cat > string2.txt → Takes input and writes to string2.txt until Ctrl+D.

```

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git push -u origin main
info: please complete authentication in your browser...
To https://github.com/nakulupadhyay/git_demo
! [rejected]        main -> main (fetch first)
error: failed to push some refs to 'https://github.com/nakulupadhyay/git_demo'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git push -force origin main
error: did you mean `--force` (with two dashes)?

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git push --force origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (6/6), 1.12 KiB | 163.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/nakulupadhyay/git_demo
+ 9cc47f4...82700a0 main -> main (forced update)

NAKUL UPADHYAY@LAPTOP-HBUNSH99 MINGW64 /d/fullstack (main)
$ git commit
On branch main
Untracked files:

```

git push origin main → Pushes committed changes to GitHub.

git push --force origin main → Forcefully pushes local code, overwriting remote