

# NAME : LIKHIL CHANDRA

## ROLL NO: 21

1. Create a new directory for this practical and initialize a Git repository inside it.
2. Create a new file named `workflow.txt` and add some initial content.

```
MINGW64:/c/Users/likhi/OneDrive/Desktop/Practical
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ mkdir CA1
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ touch workflow.txt
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ echo "Iam writing my first CA" > workflow.txt
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ cat workflow.txt
Iam writing my first CA
```

3. Check the status of the repository and note the file's current state.
4. Add the file to the staging area and verify its status.
5. 5.Commit the file with an appropriate message

```
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main

No commits yet

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Done with the 5 question"
[main (root-commit) 5a77992] Done with the 5 question
1 file changed, 1 insertion(+)
```

6. Modify the file by adding more content and check its status again.

```
MINGW64/c/Users/likhi/OneDrive/Desktop/Practical

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Done with the 5 question"
[main (root-commit) 5a77992] Done with the 5 question
1 file changed, 1 insertion(+)
create mode 100644 workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ echo "Hello World!" > workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ cat workflow.txt
Hello World!

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ echo "Hello likhi!" >> workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ cat workflow.txt
Hello World!
Hello likhi!

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
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:   workflow.txt

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt
warning: in the working copy of 'workflow.txt', LF will be replaced by CRLF the next time Git touches i
t

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Added one more line"
[main b932dd8] Added one more line
1 file changed, 2 insertions(+), 1 deletion(-)
```

7. Stage the modified file and commit the changes with a new message

```
MINGW64/c/Users/likhi/OneDrive/Desktop/Practical

$ git status
On branch main
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:   workflow.txt

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt
warning: in the working copy of 'workflow.txt', LF will be replaced by CRLF the next time Git touches i
t

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Added one more line"
[main b932dd8] Added one more line
1 file changed, 2 insertions(+), 1 deletion(-)

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ touch READMEFILE1.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ nano READMEFILE1.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Add explanation of commit states to README"
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    READMEFILE1.md

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add READMEFILE1.md
warning: in the working copy of 'READMEFILE1.md', LF will be replaced by CRLF the next time Git touches
it

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add READMEFILE1.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Add explanation of commit states to README"
[main 0868d54] Add explanation of commit states to README
1 file changed, 18 insertions(+)
create mode 100644 READMEFILE1.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
nothing to commit, working tree clean

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$
```

Explain the different commit states (untracked, staged, committed) in your README file. Use proper syntax.

```
MINGW64~/Users/likhi/OneDrive/Desktop/Practical
likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git log
commit 0868d54c1cff62d01aea9479bb4f7b7d245d6608 (HEAD -> main)
Author: Likhilchandra <likhilchandra6@gmail.com>
Date: Mon Feb 17 15:43:52 2025 +0530

    Add explanation of commit states to README

commit b932dd87d692918cd45fbdcb12bf042a8065d808
Author: Likhilchandra <likhilchandra6@gmail.com>
Date: Mon Feb 17 15:34:24 2025 +0530

    Added one more line

commit 5a779927117aaa99fbb363fec4aa111041a1f28d
Author: Likhilchandra <likhilchandra6@gmail.com>
Date: Mon Feb 17 15:29:40 2025 +0530

    Done with the 5 question

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git log --oneline
0868d54 (HEAD -> main) Add explanation of commit states to README
b932dd8 Added one more line
5a77992 Done with the 5 question

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git log --author="likhi"
commit 0868d54c1cff62d01aea9479bb4f7b7d245d6608 (HEAD -> main)
Author: Likhilchandra <likhi@likhi>
Date: Mon Feb 17 15:43:52 2025 +0530

    Add explanation of commit states to README

commit b932dd87d692918cd45fbdcb12bf042a8065d808
Author: Likhilchandra <likhi@likhi>
Date: Mon Feb 17 15:34:24 2025 +0530

    Added one more line

commit 5a779927117aaa99fbb363fec4aa111041a1f28d
Author: Likhilchandra <likhi@likhi>
Date: Mon Feb 17 15:29:40 2025 +0530

    Done with the 5 question

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git log --since="24 hours ago"
commit 0868d54c1cff62d01aea9479bb4f7b7d245d6608 (HEAD -> main)
Author: Likhilchandra <likhi@likhi>
Date: Mon Feb 17 15:43:52 2025 +0530

    Add explanation of commit states to README

commit b932dd87d692918cd45fbdcb12bf042a8065d808
Author: Likhilchandra <likhi@likhi>
Date: Mon Feb 17 15:34:24 2025 +0530

    Added one more line

commit 5a779927117aaa99fbb363fec4aa111041a1f28d
Author: Likhilchandra <likhi@likhi>
Date: Mon Feb 17 15:29:40 2025 +0530

    Done with the 5 question
```

```
MINGW64~/Users/likhi/OneDrive/Desktop/Practical
it
likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add READMEFILE2.md

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   READMEFILE2.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    READMEFILE1.md

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "New Readme file is committed"
[main d6c3feb] New Readme file is committed
1 file changed, 24 insertions(+)
create mode 100644 READMEFILE2.md

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    READMEFILE1.md

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

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ nano READMEFILE1.md

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ cat READMEFILE1.md
## Git Commit States

Git tracks the changes you make to your files in different stages, allowing you to manage and review your work before committing it to the repository. The primary commit states are:

### 1. Untracked
- **Definition**: A file is in the "untracked" state when it exists in your working directory but hasn't been added to Git's tracking system yet.
- **How to identify**: You can see untracked files when you run 'git status'. They will appear under the "Untracked files" section.
- **How to move it to the next state**: To start tracking the file, use the command:

### 2. Staged
- **Definition**: A file enters the "staged" state once you've added it to the staging area using 'git add'. It means Git is ready to commit these changes, but they haven't been committed yet.
- **How to identify**: When you run 'git status', staged files will appear under the "Changes to be committed" section.
- **How to move it to the next state**: Once staged, you can commit the file using:

### 3. Committed
- **Definition**: A file is in the "committed" state when the changes you've staged have been saved into the local Git repository with a commit. This means the changes are now part of the project's history.
- **How to identify**: Committed files are no longer listed under 'git status' since they are already recorded in the Git history. You can view your commit history with:

likhi@likhi MINGW64 ~/OneDrive/Desktop/Practical (main)
$
```

MINGW64:/c/Users/likhi/OneDrive/Desktop/Practical

```
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Done with the 5 question"
[main (root-commit) 5a77992] Done with the 5 question
1 file changed, 1 insertion(+)
create mode 100644 workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ echo "Hello World!" > workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ cat workflow.txt
Hello World!

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ echo "Hello likhi!" >> workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ cat workflow.txt
Hello World!
Hello likhi!

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
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:   workflow.txt

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt
warning: in the working copy of 'workflow.txt', LF will be replaced by CRLF the next time Git touches i
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likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add workflow.txt

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "Added one more line"
[main b932dd8] Added one more line
1 file changed, 2 insertions(+), 1 deletion(-)
```

MINGW64:/c/Users/likhi/OneDrive/Desktop/Practical  
Author: Likhilchandra <likhilchandra6@gmail.com>  
Date: Mon Feb 17 15:43:52 2025 +0530

Add explanation of commit states to README

```
likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ touch READMEFILE2.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ nano READMEFILE2.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    READMEFILE2.md
    READMEFILE2.md

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add READMEFILE2.md
warning: in the working copy of 'READMEFILE2.md', LF will be replaced by CRLF the next time Git touches
it

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git add READMEFILE2.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   READMEFILE2.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    READMEFILE2.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git commit -m "New Readme file is committed"
[main d6c3feb] New Readme file is committed
1 file changed, 24 insertions(+)
create mode 100644 READMEFILE2.md

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$ git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    READMEFILE2.md

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

likhi@hi MINGW64 ~/OneDrive/Desktop/Practical (main)
$
```

78°F  
Sunny

Search



ENG  
IN



3:56 PM  
2/17/2025