SELF LEARNING BATCH 2025

Version Control using Git

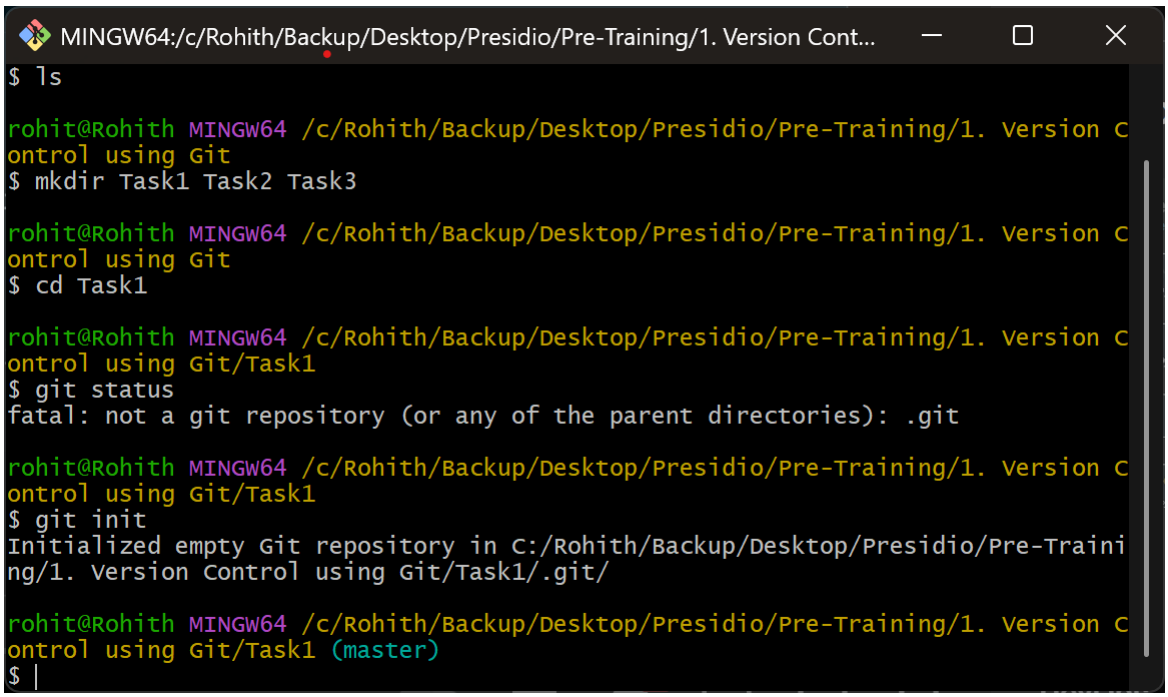
1. **Initialize, Commit, and Branch Basics**

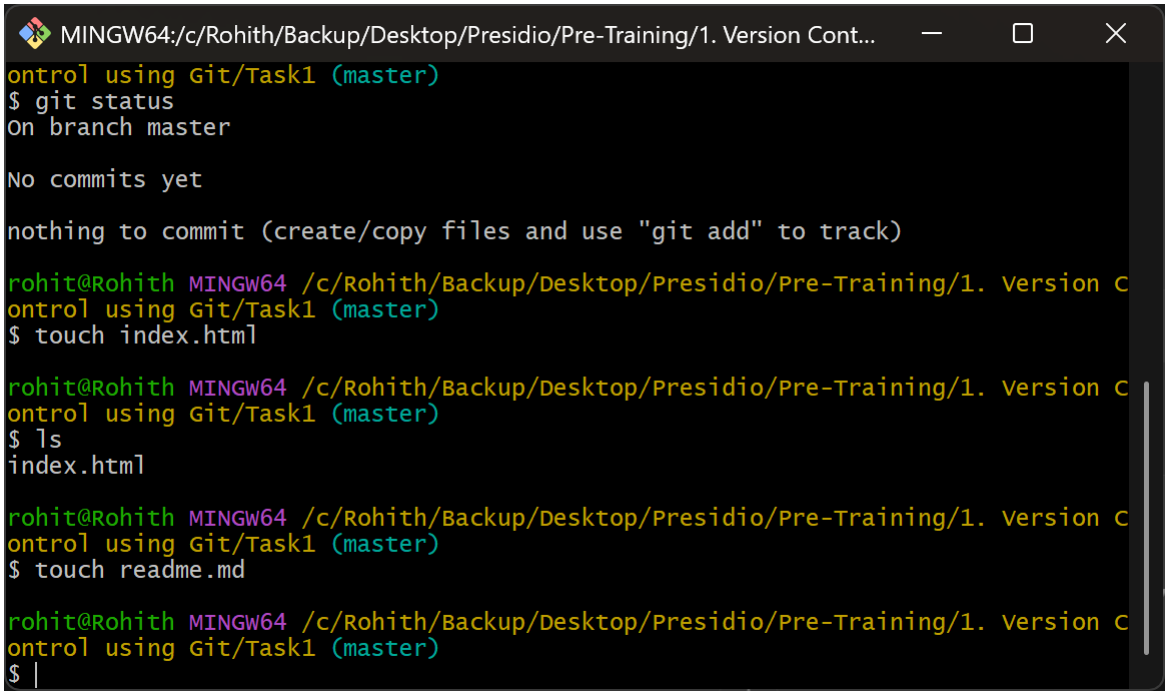
Objective:

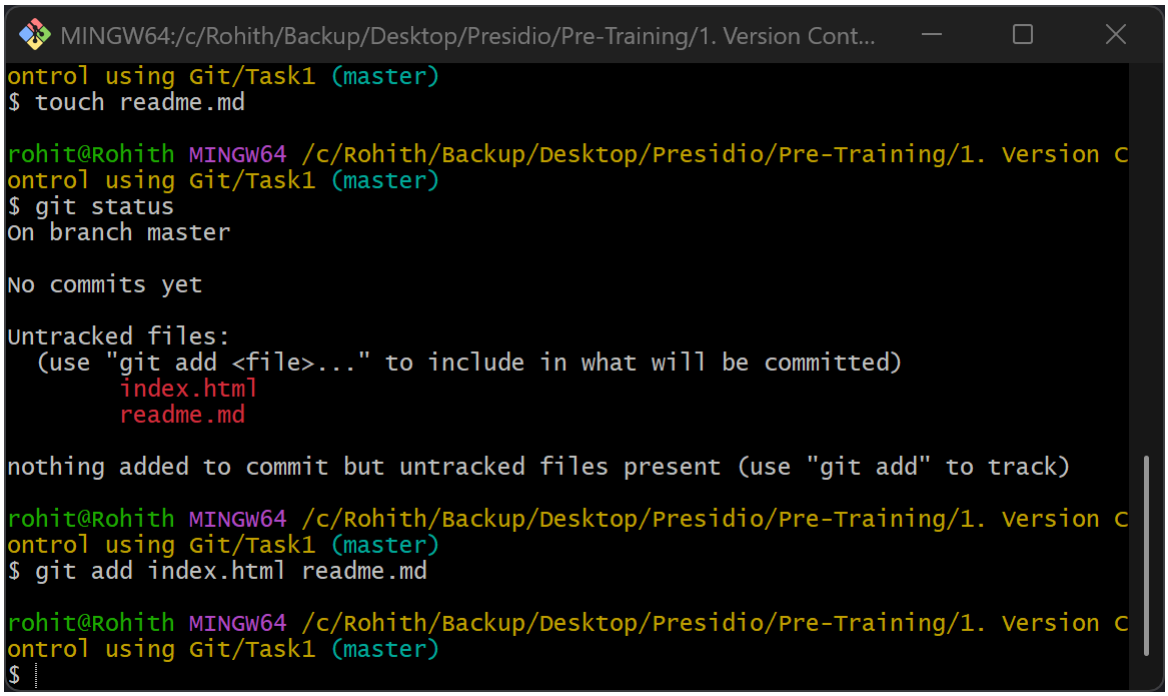
- **Initialize a new Git repository.**
- **Create a few files and commit them.**
- **Create a new branch, make changes, and merge it back to the main branch.**

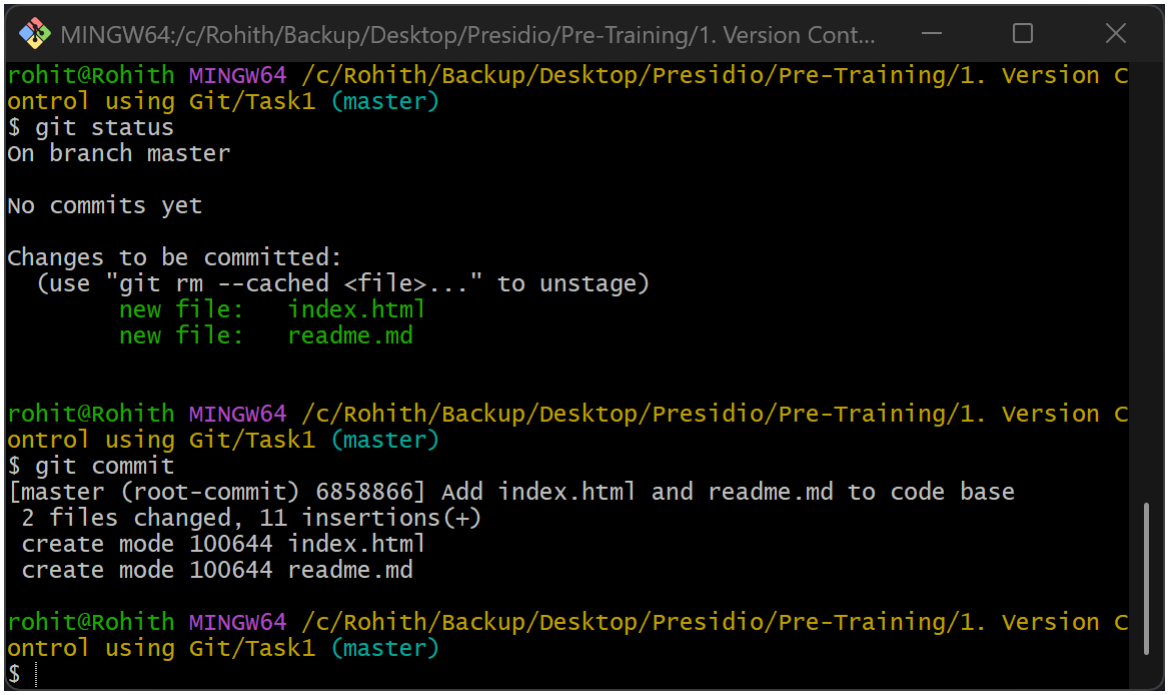
Requirements:

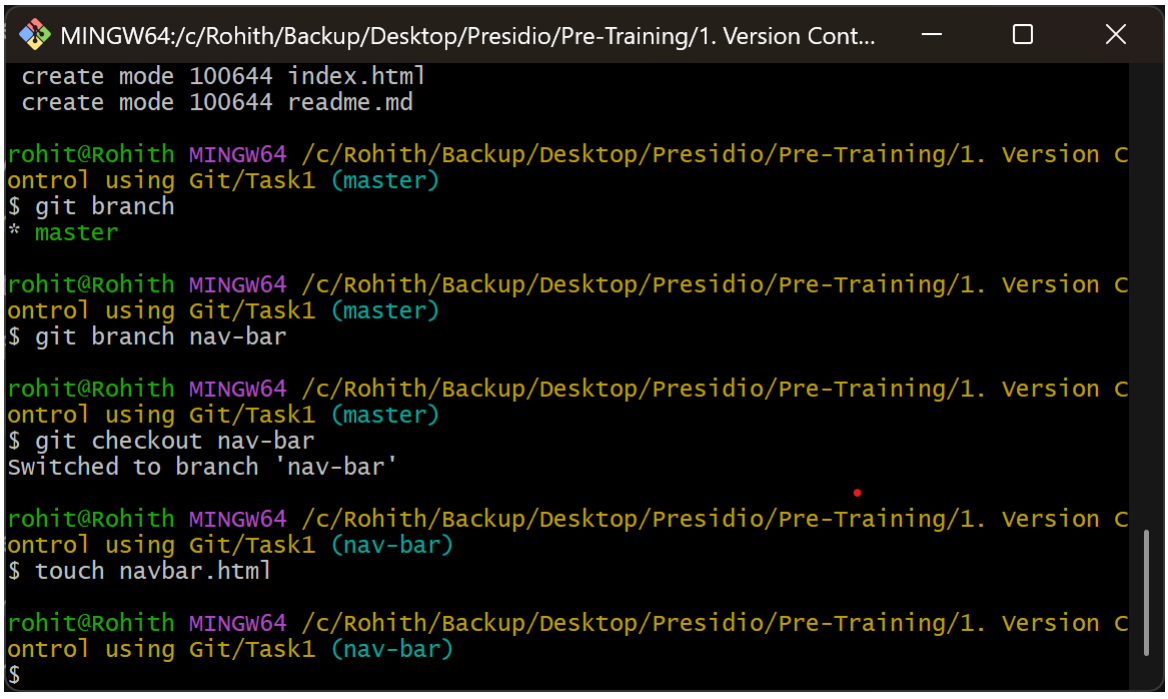
- **Use git init, git add, and git commit to start your repository.**
- **Create a branch using git branch or git checkout -b and switch between branches.**
- **Merge the branch back to the main branch and verify the commit history.**



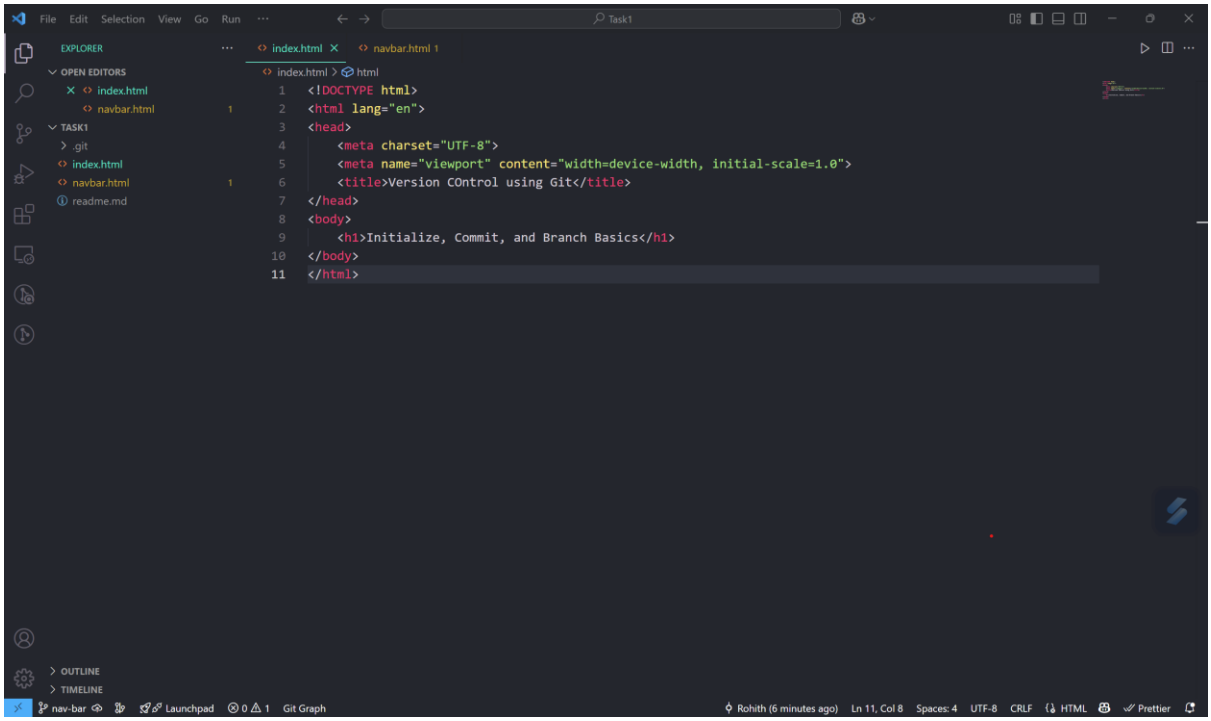

MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task1 (master)
$ git status
On branch master
No commits yet
nothing to commit (create/copy files and use "git add" to track)
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ touch index.html
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ ls
index.html
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ touch readme.md
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$

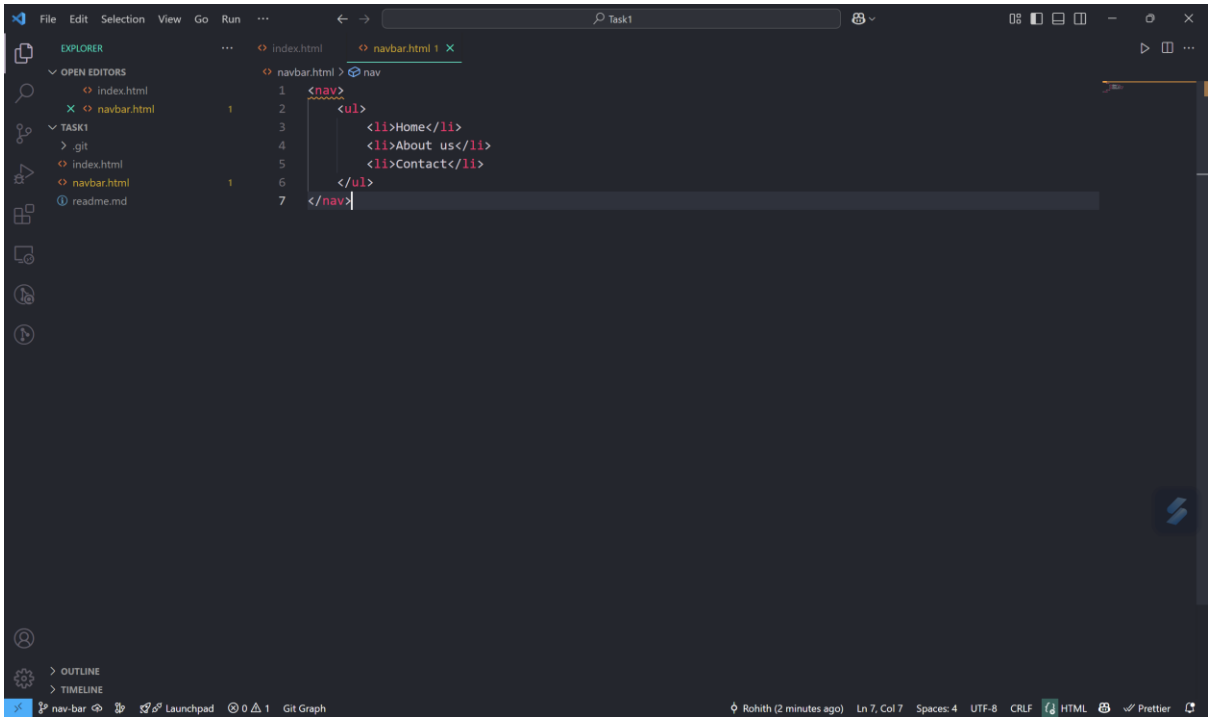

MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
ontrol using Git/Task1 (master)
$ touch readme.md
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git status
On branch master
No commits yet
Untracked files:
(use "git add <file>..." to include in what will be committed)
index.html
readme.md
nothing added to commit but untracked files present (use "git add" to track)
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git add index.html readme.md
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$


MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git status
On branch master
No commits yet
Changes to be committed:
(use "git rm --cached <file>..." to unstage)
new file: index.html
new file: readme.md
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git commit
[master (root-commit) 6858866] Add index.html and readme.md to code base
2 files changed, 11 insertions(+)
create mode 100644 index.html
create mode 100644 readme.md
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$


MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
create mode 100644 index.html
create mode 100644 readme.md
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git branch
* master
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git branch nav-bar
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git checkout nav-bar
Switched to branch 'nav-bar'
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$ touch navbar.html
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$

At branch nav-bar:





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MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...

rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$ touch navbar.html

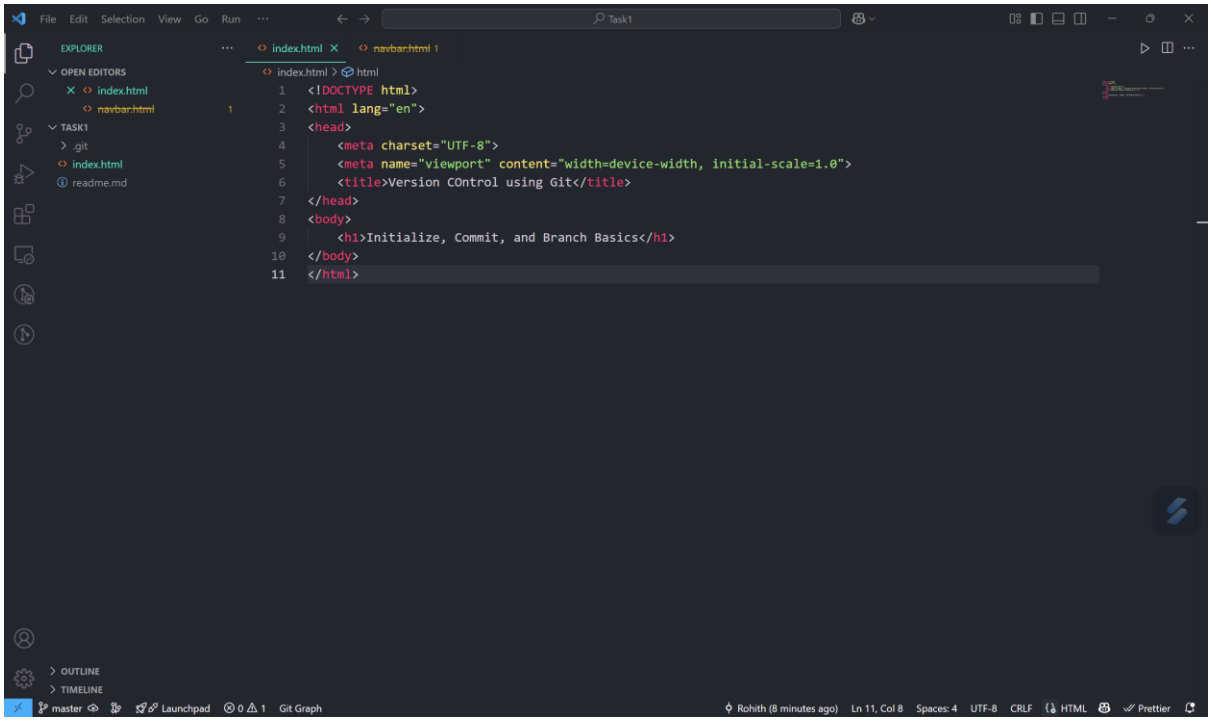
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$ git add navbar.html

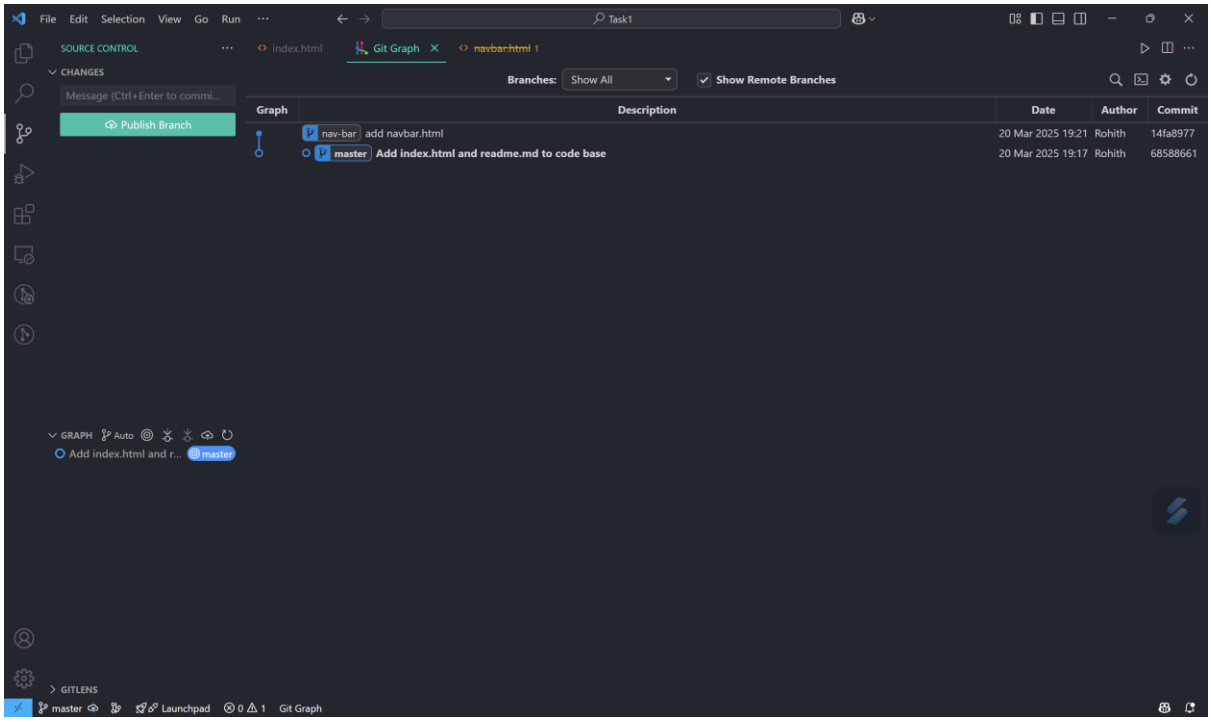
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$ git commit -m "add navbar.html"
[nav-bar 14fa897] add navbar.html
 1 file changed, 7 insertions(+)
 create mode 100644 navbar.html

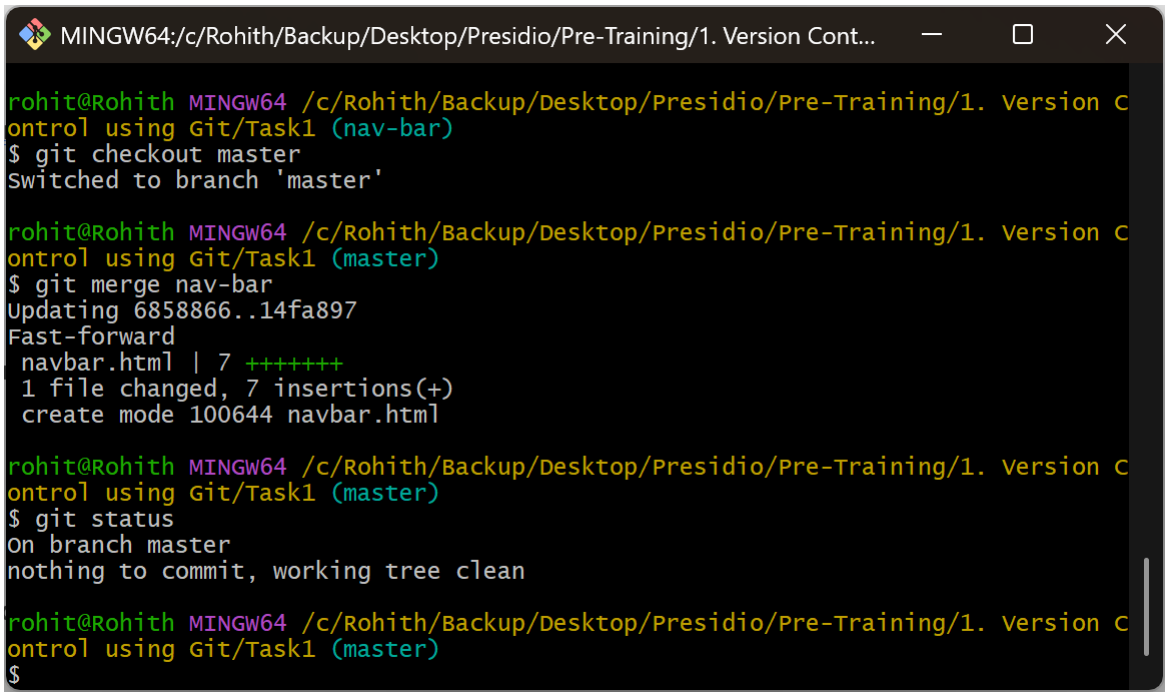
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$ git checkout master
Switched to branch 'master'

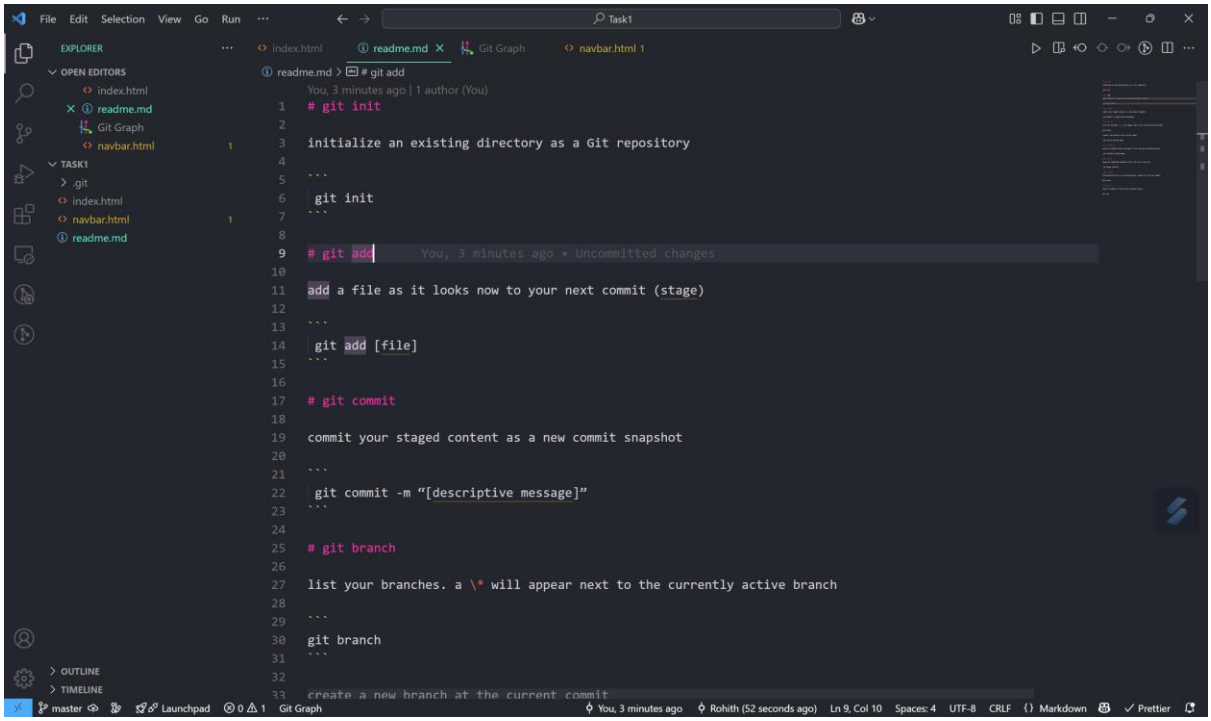
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$
```

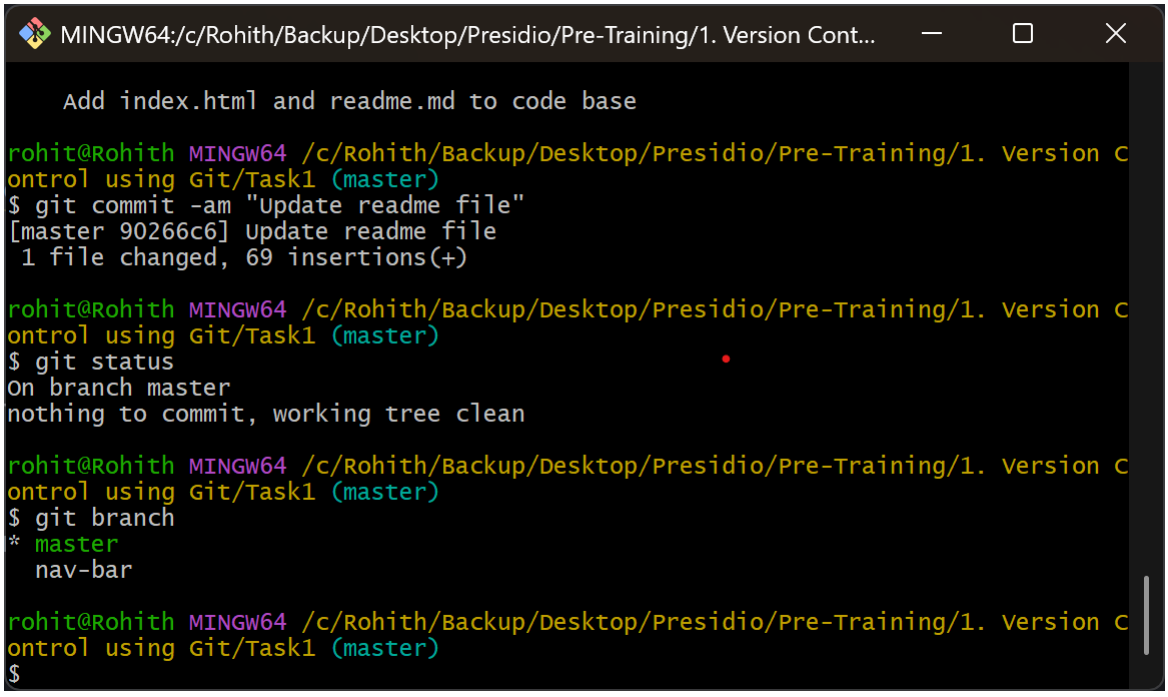
At master branch

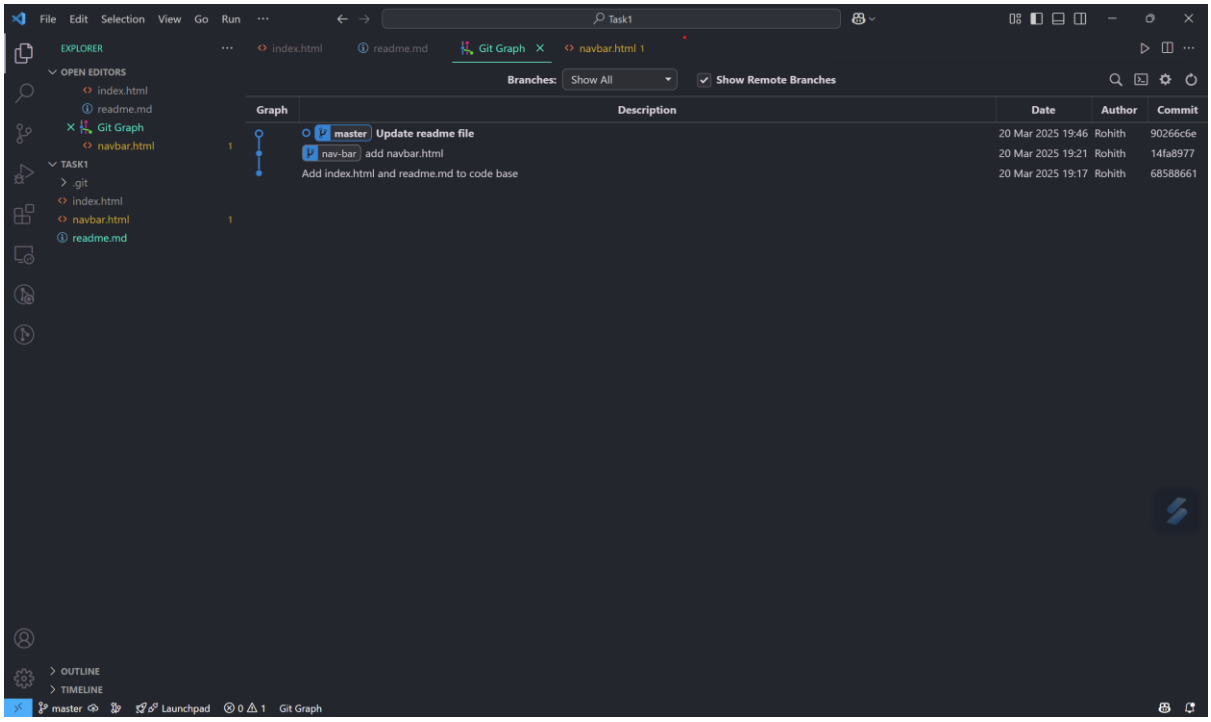



File Edit Selection View Go Run
Task1
SOURCE CONTROL
CHANGES
Message (Ctrl+Enter to commi...
Publish Branch
index.html
Git Graph
navbar.html 1
Branches: Show All
Show Remote Branches
Graph
Description
Date
Author
Commit
nav-bar add navbar.html
20 Mar 2025 19:21 Rohith 14fa8977
master Add index.html and readme.md to code base
20 Mar 2025 19:17 Rohith 68588661
GRAPH Auto
Add index.html and r... master
GITLENS
master Launchpad 0 1 Git Graph


MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (nav-bar)
$ git checkout master
Switched to branch 'master'
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git merge nav-bar
Updating 6858866..14fa897
Fast-forward
navbar.html | 7 +++++++
1 file changed, 7 insertions(+)
create mode 100644 navbar.html
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git status
On branch master
nothing to commit, working tree clean
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$


File Edit Selection View Go Run
Task1
EXPLORER
OPEN EDITORS
index.html
readme.md
Git Graph
navbar.html 1
TASK1
.git
index.html
navbar.html 1
readme.md
OUTLINE
TIMELINE
readme.md > # git add
You, 3 minutes ago | 1 author (You)
git init
initialize an existing directory as a Git repository
```
git init
```
git add
You, 3 minutes ago • Uncommitted changes
add a file as it looks now to your next commit (stage)
```
git add [file]
```
git commit
commit your staged content as a new commit snapshot
```
git commit -m “[descriptive message]”
```
git branch
list your branches. a * will appear next to the currently active branch
```
git branch
```
create a new branch at the current commit
master
Launchpad
Git Graph
You, 3 minutes ago
Rohith (52 seconds ago)
Ln 9, Col 10
Spaces: 4
UTF-8
CRLF
Markdown
Prettier


MINGW64:/c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version Cont...
Add index.html and readme.md to code base
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git commit -am "Update readme file"
[master 90266c6] Update readme file
1 file changed, 69 insertions(+)
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git status
On branch master
nothing to commit, working tree clean
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$ git branch
* master
nav-bar
rohit@Rohith MINGW64 /c/Rohith/Backup/Desktop/Presidio/Pre-Training/1. Version C
ontrol using Git/Task1 (master)
$


File Edit Selection View Go Run
Task1
EXPLORER
index.html
readme.md
Git Graph
navbar.html 1
OPEN EDITORS
index.html
readme.md
Git Graph
navbar.html 1
TASK1
.git
index.html
navbar.html 1
readme.md
Branches: Show All
Show Remote Branches
Graph
Description
Date
Author
Commit
master Update readme file
20 Mar 2025 19:46 Rohith 90266c6e
nav-bar add navbar.html
20 Mar 2025 19:21 Rohith 14fa8977
Add index.html and readme.md to code base
20 Mar 2025 19:17 Rohith 68588661
OUTLINE
TIMELINE
master
Launchpad
0 1
Git Graph