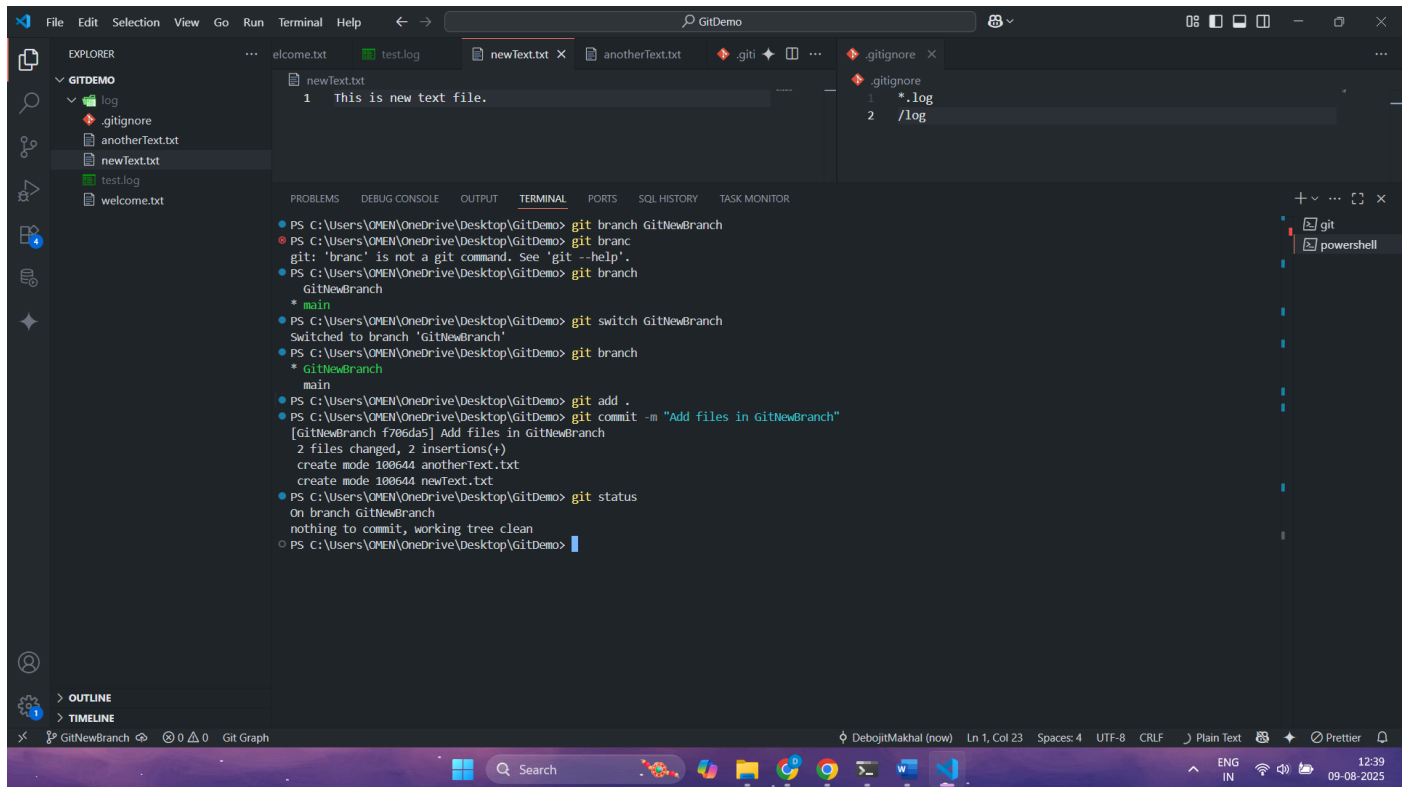


# Branching

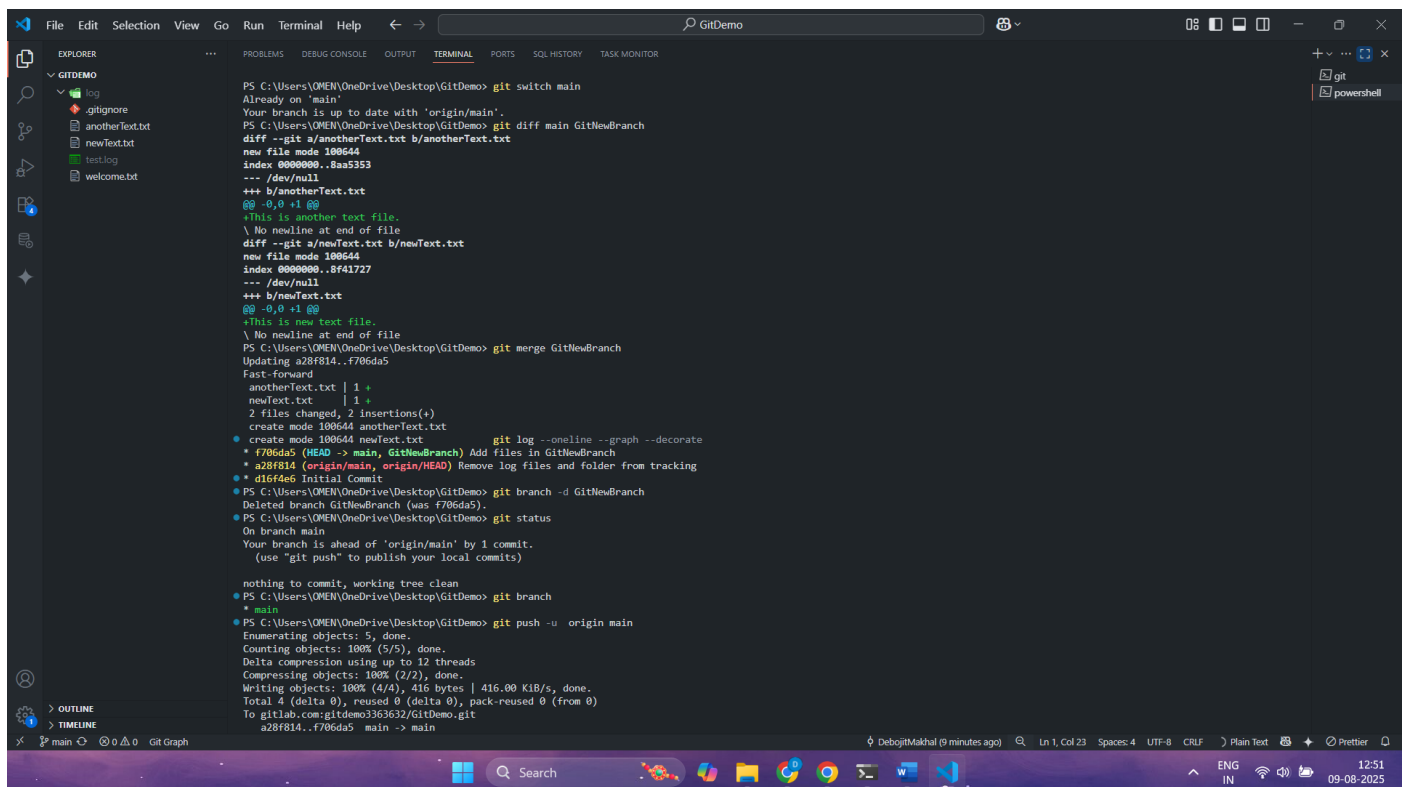


The screenshot shows a Visual Studio Code editor with a project named 'GitDemo'. The Explorer sidebar on the left shows a file structure with 'log', '.gitignore', 'anotherText.txt', 'newText.txt', 'test.log', and 'welcome.txt'. The main editor area displays the 'newText.txt' file with the content: '1 This is new text file.' Below the editor, the TERMINAL panel shows a series of Git commands and their outputs:

```
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git branch GitNewBranch
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git branch
git: 'branch' is not a git command. See 'git --help'.
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git branch
      GitNewBranch
* main
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git switch GitNewBranch
Switched to branch 'GitNewBranch'
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git branch
      GitNewBranch
* main
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git add .
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git commit -m "Add files in GitNewBranch"
[GitNewBranch f706da5] Add files in GitNewBranch
2 files changed, 2 insertions(+)
create mode 100644 anotherText.txt
create mode 100644 newText.txt
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git status
On branch GitNewBranch
nothing to commit, working tree clean
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo>
```

The status bar at the bottom indicates the current branch is 'GitNewBranch' and the working tree is clean.

# Merging



The screenshot shows the same Visual Studio Code editor after merging the 'GitNewBranch' back into 'main'. The Explorer sidebar shows the same file structure. The TERMINAL panel shows the following commands and outputs:

```
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git switch main
Already on 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git diff main GitNewBranch
diff --git a/anotherText.txt b/anotherText.txt
new file mode 100644
index 00000000..8aa5353
--- /dev/null
+++ b/anotherText.txt
@@ -0,0 +1 @@
+This is another text file.
\ No newline at end of file
diff --git a/newText.txt b/newText.txt
new file mode 100644
index 00000000..8f41727
--- /dev/null
+++ b/newText.txt
@@ -0,0 +1 @@
+This is new text file.
\ No newline at end of file
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git merge GitNewBranch
Updating a28f814..f706da5
Fast-forward
  anotherText.txt | 1 +
  newText.txt    | 1 +
  2 files changed, 2 insertions(+)
  create mode 100644 anotherText.txt
  create mode 100644 newText.txt
  * f706da5 (HEAD -> main, GitNewBranch) Add files in GitNewBranch
  * a28f814 (origin/main, origin/HEAD) Remove log files and folder from tracking
  * d16f4e6 Initial Commit
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git branch -d GitNewBranch
Deleted branch GitNewBranch (was f706da5).
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git branch
* main
PS C:\Users\OMEN\OneDrive\Desktop\GitDemo> git push -u origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 416 bytes | 416.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To gitlab.com:gitdemo363632/GitDemo.git
a28f814..f706da5 main -> main
```

The status bar at the bottom now shows the current branch is 'main'.