

Objectives :

Familiar with Git commands like git init, git status, git add, git commit, git push, and git pull.

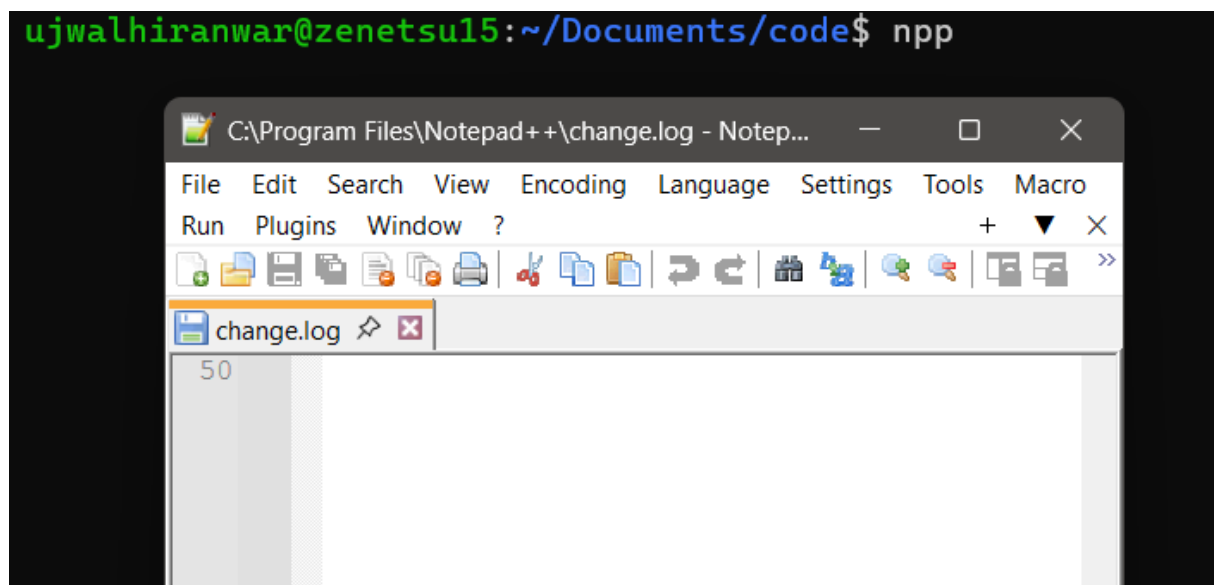
Step 1: Setup your machine with Git Configuration

1. To check if the configuration is properly set

```
ujwalhiranwar@zenetsu15:~/Documents/code$ git config --global --list
user.email=ujwalhiranwar15@gmail.com
user.name=Ujwal-Hiranwar
core.editor=nano
```

Step 2: Integrate notepad++.exe to Git and make it a default editor

1. To open notepad++ from bash.



2. Set notepad++ as a default editor

```
ujwalhiranwar@zenetsu15:~/Documents/code$ git config --global --list
user.email=ujwalhiranwar15@gmail.com
user.name=Ujwal-Hiranwar
core.editor=notepad++.exe -multiInst -nosession
```

Step 3: Add a file to source code repository

1. initializes the "GitDemo" repository

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ ls -al
total 12
drwxr-xr-x 3 ujwalhiranwar ujwalhiranwar 4096 Aug  8 18:18 .
drwxr-xr-x 3 ujwalhiranwar ujwalhiranwar 4096 Aug  8 18:24 ..
drwxr-xr-x 7 ujwalhiranwar ujwalhiranwar 4096 Aug  8 18:18 .git
```

2. To verify if the file "welcome.txt" is created

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ ls -al
total 16
drwxr-xr-x 3 ujwalhiranwar ujwalhiranwar 4096 Aug  8 18:29 .
drwxr-xr-x 3 ujwalhiranwar ujwalhiranwar 4096 Aug  8 18:24 ..
drwxr-xr-x 7 ujwalhiranwar ujwalhiranwar 4096 Aug  8 18:18 .git
-rw-r--r-- 1 ujwalhiranwar ujwalhiranwar   27 Aug  8 18:29 welcome.txt
```

3. To verify the content

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ cat welcome.txt
Welcome to version control
```

4. Check the status

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ git status
On branch master

No commits yet

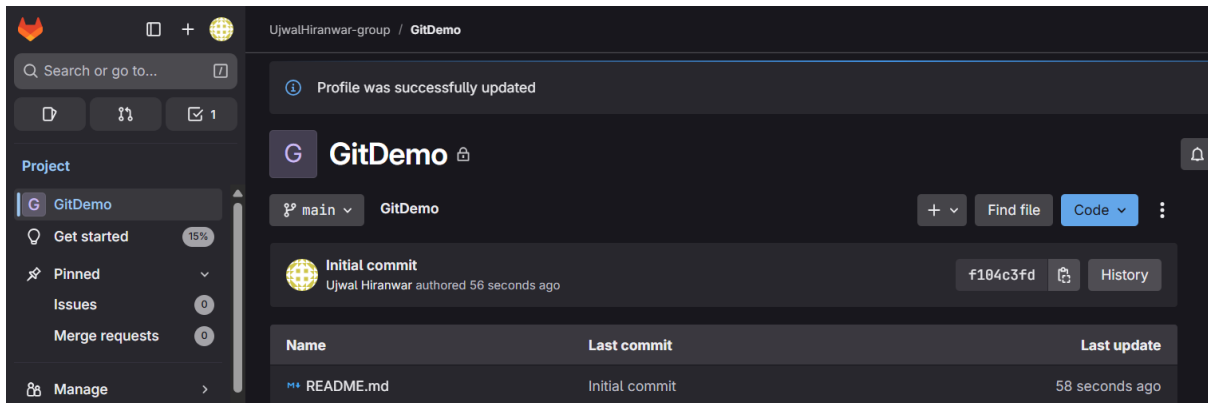
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    welcome.txt

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

5. To check if local and "Working Directory" git repository are same, **welcome.txt** is added to the local repository.

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ git status
On branch master
nothing to commit, working tree clean
```

6. Signup with GitLab and create a remote repository "GitDemo"



The screenshot shows the GitLab web interface for a repository named "GitDemo". The page includes a sidebar with navigation options like "Project", "Get started", "Pinned", "Issues", "Merge requests", and "Manage". The main content area shows the repository details, including a notification "Profile was successfully updated", the repository name "GitDemo", and a table of commits. The first commit is the "Initial commit" by Ujwal Hiranwar, created 56 seconds ago, with a commit hash of f104c3fd. The table also shows a "README.md" file added in the initial commit, updated 58 seconds ago.

Name	Last commit	Last update
README.md	Initial commit	58 seconds ago

7. To pull the remote repository

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ git pull
Username for 'https://gitlab.com': UjwalHiranwar
Password for 'https://UjwalHiranwar@gitlab.com':
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 (from 0)
Unpacking objects: 100% (3/3), 300 bytes | 13.00 KiB/s, done.
From https://gitlab.com/ujwalhiranwar-group/GitDemo
   37cf3ce..bb21dda  main       -> origin/main
Updating 37cf3ce..bb21dda
Fast-forward
 welcome.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
```

8. To push the local to remote repository

```
ujwalhiranwar@zenetsu15:~/Documents/code/GitDemo$ git push
Username for 'https://gitlab.com': UjwalHiranwar
Password for 'https://UjwalHiranwar@gitlab.com':
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% (3/3), 326 bytes | 326.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://gitlab.com/ujwalhiranwar-group/GitDemo.git
   bb21dda..54d4215  main -> main
```