

## 1. Git-HOL

### Step 1: Setup your machine with Git Configuration

```
aswin@LAPTOP-VM75B374 MINGW64 ~
$ git version
git version 2.49.0.windows.1

aswin@LAPTOP-VM75B374 MINGW64 ~
$ ^[[200~git config --global user.name "Your Name"
bash: $'\E[200~git': command not found

aswin@LAPTOP-VM75B374 MINGW64 ~
$ git config --global user.name "Aswin"

aswin@LAPTOP-VM75B374 MINGW64 ~
$ git config --global user.email "aswinaswin.k654321@gmail.com"

aswin@LAPTOP-VM75B374 MINGW64 ~
$ git config --global --list
user.name=Aswin
user.email=aswinaswin.k654321@gmail.com
```

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

```
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=schannel
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.name=Aswin
user.email=aswinaswin.k654321@gmail.com
core.editor=notepad++ -multiInst -notabbar -nosession -noPlugin

aswin@LAPTOP-VM75B374 MINGW64 ~
$ git config --global -e
hint: Waiting for your editor to close the file...
```

```
[user]
name = Aswin
email = aswinaswin.k654321@gmail.com

[core]
editor = notepad++ -multiInst -notabbar -nosession -noPlugin
```

### Step 3: Add a file to source code repository

```
aswin@LAPTOP-VM75B374 MINGW64 ~
$ mkdir ~/GitDemo

aswin@LAPTOP-VM75B374 MINGW64 ~
$ cd ~/GitDemo

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo
$ git init
bash: git init: command not found

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo
$ git init
bash: git init: command not found

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo
$ git init
Initialized empty Git repository in C:/Users/aswin/GitDemo/.git/

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ ls -la
total 36
drwxr-xr-x 1 aswin 197609 0 Aug 11 09:52 ./
drwxr-xr-x 1 aswin 197609 0 Aug 11 09:51 ../
drwxr-xr-x 1 aswin 197609 0 Aug 11 09:52 .git/

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ echo "Welcome to GitDemo" > welcome.txt

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ cat welcome.txt
Welcome to GitDemo

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ 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)

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ git add welcome.txt
warning: in the working copy of 'welcome.txt', LF will be replaced by CRLF the next time Git touches it

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ git commit
Aborting commit due to empty commit message.

aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$
```

```
aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ git commit -m "Initial commit: add welcome.txt"
[master (root-commit) 8823172] Initial commit: add welcome.txt
1 file changed, 1 insertion(+)
create mode 100644 welcome.txt
```

```
aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ git status
On branch master
nothing to commit, working tree clean
```

```
aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (master)
$ git log --oneline
git: 'log --oneline' is not a git command. See 'git --help'.
```

#### Step 4: Signup with GitLab and create a remote repository “GitDemo”

```
aswin@LAPTOP-VM75B374 MINGW64 ~/GitDemo (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 318 bytes | 318.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://gitlab.com/aswinaswin.k654321/gitdemo.git
c9e68a5..e86ffac main -> main
```

The screenshot displays the GitLab web interface for a repository named 'GitDemo' by user 'Aswin Aswin'. The breadcrumb navigation shows 'main' branch and the file path 'gitdemo / welcome.txt'. The file 'welcome.txt' is highlighted, with buttons for 'Find file', 'Blame', 'Edit', and a menu icon. Below this, a commit history entry is shown: 'Initial commit: add welcome.txt' by 'Aswin Aswin' 22 minutes ago, with commit hash 'e86ffac2' and a 'History' link. The file content area shows 'welcome.txt' (19 B) with a download icon. The file content is displayed in a code editor with line numbers: '1 Welcome to GitDemo' and '2'. A scrollbar is visible at the bottom of the code editor.