Name = Chaitali Anil Jadhav

PRN=250843420012

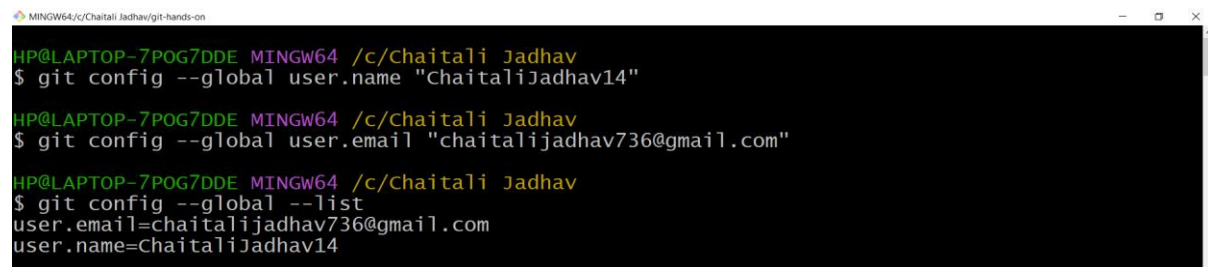## **Assignment: Git Hands-on Practice**

Task 1: Configure Git

1. Set your username and email in Git.

2. Verify the configuration.

$ git config --global user.name "ChaitaliJadhav14"

$ git config --global email.name chaitalijadhav736@gmail.com

$ git config list

Task 2: Initialize a Local Repository
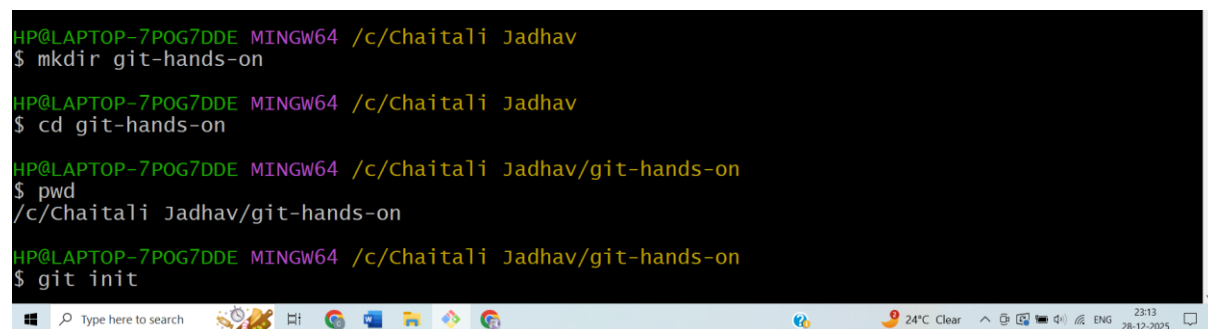
1. Create a new folder named `git-hands-on`.

2. Initialize it as a Git repository.

3. Check the repository status.

$ git init

$ git status

Task 3: Create and Track Files

1. Create a file named `documentation.txt`.

2. Add a short project description inside it.

3. Check file status.

4. Stage the file.

5. Commit the changes with an appropriate message.

$ git status

$ git add documentation.txt

$ git commit -m "Add initial documentation"

Task 4: Modify and Commit Changes

1. Edit `documentation.txt` and add one more line.

2. View the differences between working directory and staging area.

3. Stage and commit the changes.

$ git diff

$ git add documentation.txt

Task 5: View Commit History

1. View the complete commit history.

2. View commit history in one-line format.

Task 6: Create and Work with Branches


```
HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git branch feature-1

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git checkout feature-1
Switched to branch 'feature-1'

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (feature-1)
$ git add feature.txt

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (feature-1)
$ git commit -m "Add feature-1 file"
[feature-1 cc3be97] Add feature-1 file
 1 file changed, 1 insertion(+)
 create mode 100644 feature.txt

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (feature-1)
$ git checkout master
Switched to branch 'master'

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git merge feature-1
Updating 15f38e3..cc3be97
Fast-forward
 feature.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 feature.txt
```

Task 7: Merge Branches

1. Merge `feature-1` branch into `main`.

2. Verify the merge using commit history.

$ git merge feature-1

$ git log


```
HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (feature-1)
$ git checkout master
Switched to branch 'master'

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git merge feature-1
Updating 15f38e3..cc3be97
Fast-forward
 feature.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 feature.txt

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git log --oneline --a11
fatal: unrecognized argument: --a11

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git log --oneline --all
cc3be97 (HEAD -> master, feature-1) Add feature-1 file
15f38e3 Update documentation with Git Commands
182f5ec Add initial documentation

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git remote add origin https://github.com/ChaitaliJadhav14/git-hands-on.git

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git remote -v
```
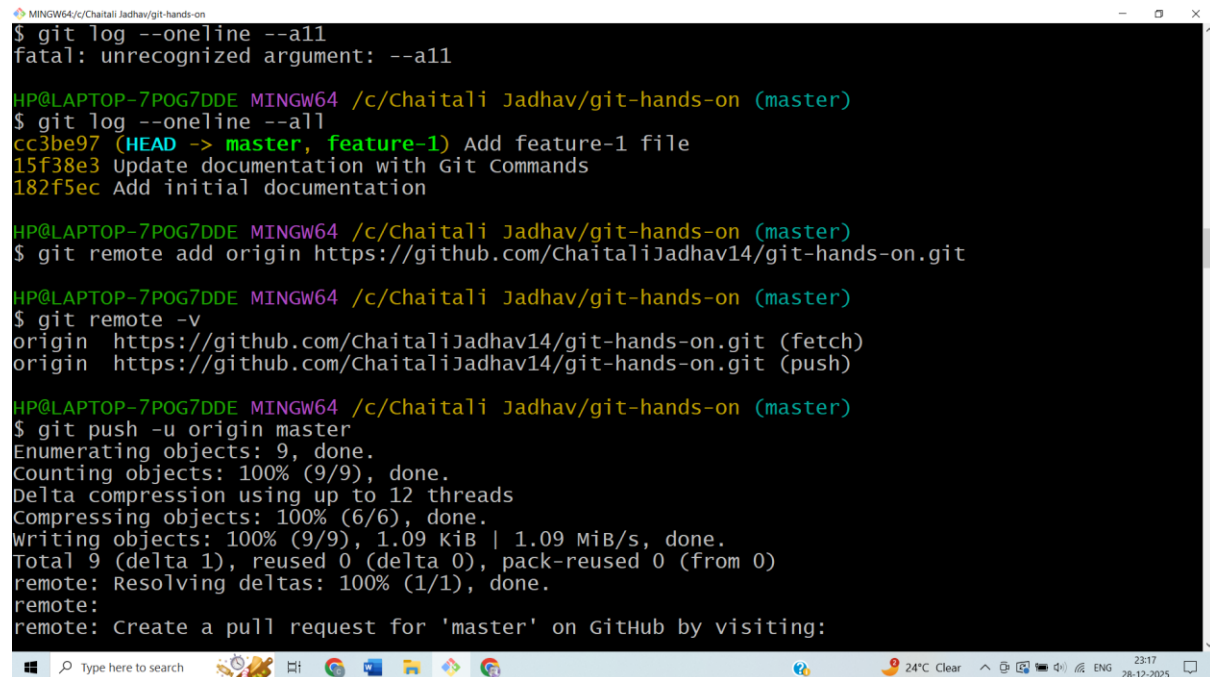
Task 8: Connect to a Remote Repository

1. Create a new repository on GitHub.

2. Add the remote repository URL to your local repo.

3. Verify the remote connection.

$ git remote add origin https://github.com/ChaitaliJadhav14/git-hands-on.git

$ git remote -v

Task 9: Push Code to GitHub

1. Push the `main` branch to GitHub.

2. Verify files on GitHub.

$ git remote add origin https://github.com/ChaitaliJadhav14/git-hands-on.git
$ git push -u origin master

Task 10: Clone a Repository

1. Clone the same GitHub repository into a different folder.

2. Verify the cloned content.

```
$ git clone https://github.com/ChaitaliJadhav14/git-hands-on.git
$ cd Assign
```
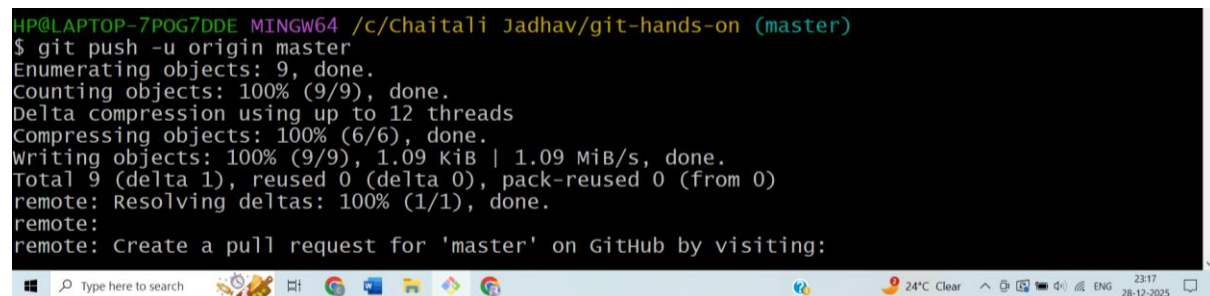
```
HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git clone https://github.com/ChaitaliJadhav14/git-hands-on.git
Cloning into 'git-hands-on'...
remote: Enumerating objects: 15, done.
remote: Counting objects: 100% (15/15), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 15 (delta 1), reused 11 (delta 1), pack-reused 0 (from 0)
Receiving objects: 100% (15/15), done.
Resolving deltas: 100% (1/1), done.

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ |
```

Task 11: Undo Changes

1. Make a change in `documentation.txt` but do not commit.

2. Discard the changes.

3. Verify the file status.

```
$ git checkout master
$ cd -
$ git status
$ git add -A
$ git status
```

MINGW64:/c/Chaitali Jadhav/git-hands-on

```
HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git checkout master
Already on 'master'
Your branch is up to date with 'origin/master'.

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ cd -
/c/Chaitali Jadhav

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav
$ cd -
/c/Chaitali Jadhav/git-hands-on

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ cd -
/c/Chaitali Jadhav

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav
$ git status
fatal: not a git repository (or any of the parent directories): .git

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav
$ cd -
/c/Chaitali Jadhav/git-hands-on

HP@LAPTOP-7POG7DDE MINGW64 /c/Chaitali Jadhav/git-hands-on (master)
$ git status
```

Task 12: Remove Files9

1. Delete `feature.txt` using Git.

2. Commit the deletion.

```
$ git rm feature.txt
$ git commit -m "feature file delete"
```