

## GIT & GITHUB BASICS (ONE-LINERS)

### 1. What is Git?

Git is a distributed version control system to track code changes.

### 2. What is GitHub?

GitHub is a cloud platform to host and manage Git repositories.

### 3. Check Git Version

```
git --version
```

'| Shows installed Git version.

### 4. Configure Git User

```
git config --global user.name "Name"
```

```
git config --global user.email "email"
```

'| Sets username and email for commits.

### 5. Initialize Repository

```
git init
```

'| Creates a new Git repository.

### 6. Clone Repository

```
git clone <url>
```

'| Copies remote repo to local system.

### 7. Check File Status

```
git status
```

'| Shows modified, staged, and untracked files.

### 8. Add Files to Staging

```
git add .
```

'j Moves changes to staging area.

#### 9. Commit Changes

`git commit -m "message"`

'j Saves changes with a message.

#### 10. View Commit History

`git log`

'j Displays commit history.

#### 11. Create Branch

`git branch feature`

'j Creates a new branch.

#### 12. Switch Branch

`git checkout feature`

'j Moves to another branch.

#### 13. Create & Switch Branch

`git checkout -b feature`

'j Creates and switches branch.

#### 14. Merge Branch

`git merge feature`

'j Combines feature branch into current branch.

#### 15. Add Remote Repo

`git remote add origin <url>`

'i Connects local repo to GitHub.

#### 16. Push Code

```
git push origin main
```

'i Uploads code to GitHub.

#### 17. Pull Code

```
git pull origin main
```

'i Downloads and merges remote changes.

#### 18. Fetch Code

```
git fetch
```

'i Downloads changes without merging.

#### 19. Undo Local Changes

```
git checkout -- file.txt
```

'i Discards local file changes.

#### 20. Stash Changes

```
git stash
```

'i Temporarily saves uncommitted changes.

#### 21. Apply Stash

```
git stash pop
```

'i Restores stashed changes.

#### 22. What is Pull Request?

Pull Request is a request to merge code into another branch.

23. What is Fork?

Fork is a copy of a repository to your GitHub account.

24. What is .gitignore?

File that tells Git which files to ignore.

25. What is HEAD?

HEAD points to the current commit.