

## Beginner Git Bash & GitHub Hands-On Guide (Education Domain)

### 1. Initialize a Local Repository

1. Open Git Bash.
2. Create a new folder: `mkdir school_project`
3. Navigate into it: `cd school_project`
4. Initialize Git: `git init`
5. Create a sample file: `echo "Welcome to Git!" > intro.txt`
6. Check status: `git status`

### 2. Commit Files to Local Repository

7. Stage the file: `git add intro.txt`
8. Commit it: `git commit -m "Initial commit for education project"`
9. View logs: `git log`

### 3. Create a README and Push to GitHub

10. Create README: `echo "# School Project Repository" > README.md`
11. Stage and commit: `git add README.md && git commit -m "Added README"`
12. Create a new repository on GitHub named `school_project`.
13. Connect remote: `git remote add origin <repository_url>`
14. Push: `git push -u origin main`

### 4. Clone an Educational Repository

15. Find a public GitHub repository (e.g., educational resources).
16. Open Git Bash where you want to clone.
17. Run: `git clone <repository_url>`
18. Navigate into folder: `cd cloned_repo`
19. Check files: `ls`

### 5. Create and Merge a Branch

20. Create branch: `git branch notes`
21. Switch branch: `git checkout notes`
22. Add new file: `echo "Learning Git concepts" > notes.txt`
23. Stage and commit: `git add notes.txt && git commit -m "Added notes"`
24. Switch to main: `git checkout main`
25. Merge: `git merge notes`