### **1. Basic Commands**

* **Initialize a repository**:  
  git init
* **Clone a repository**:  
  git clone <repository\_url>
* **Check status**:  
  git status
* **Add files to staging area**:  
  git add <file>  
  git add . (add all changes)
* **Commit changes**:  
  git commit -m "Commit message"

### **2. Branching and Merging**

* **Create a new branch**:  
  git branch <branch\_name>
* **Switch to a branch**:  
  git checkout <branch\_name>  
  or  
  git switch <branch\_name>
* **Create and switch to a new branch**:  
  git checkout -b <branch\_name>  
  or  
  git switch -c <branch\_name>
* **List all branches**:  
  git branch
* **Merge a branch**:  
  git merge <branch\_name>
* **Delete a branch**:  
  git branch -d <branch\_name>

### **3. Undoing Changes**

* **Undo changes in working directory**:  
  git checkout -- <file>
* **Unstage changes**:  
  git reset <file>
* **Amend the last commit**:  
  git commit --amend -m "New commit message"
* **Revert a commit (creates a new commit)**:  
  git revert <commit\_hash>
* **Reset to a previous commit**:  
  git reset --hard <commit\_hash>

### **4. Syncing with Remote**

* **Add a remote repository**:  
  git remote add origin <repository\_url>
* **Push changes**:  
  git push origin <branch\_name>
* **Pull changes**:  
  git pull origin <branch\_name>
* **Fetch changes**:  
  git fetch origin
* **Set upstream branch**:  
  git push --set-upstream origin <branch\_name>

### **5. Viewing Changes**

* **View commit history**:  
  git log  
  git log --oneline (compact view)
* **Show changes in files**:  
  git diff
* **View staged changes**:  
  git diff --staged

### **6. Stashing**

* **Stash changes**:  
  git stash
* **List stashes**:  
  git stash list
* **Apply stash**:  
  git stash apply
* **Drop stash**:  
  git stash drop
* **Apply and remove stash**:  
  git stash pop

### **7. Tagging**

* **Create a tag**:  
  git tag <tag\_name>
* **List tags**:  
  git tag
* **Push tags to remote**:  
  git push origin --tags
* **Delete a tag**:  
  git tag -d <tag\_name>

### **8. Collaboration**

* **Create a pull request (PR)**:  
  Push your branch to the remote repository and create a PR using the hosting service (e.g., GitHub).
* **View remote URLs**:  
  git remote -v

### **9. Miscellaneous**

* **Check current branch**:  
  git branch --show-current
* **Show details of a specific commit**:  
  git show <commit\_hash>
* **Clean untracked files**:  
  git clean -f
* **Short summary of repository status**:  
  git status -s