# Git/GitHub Cheat Sheet (Beginner)

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| Step | Command | Description |
| Setup | mkdir "\_repos" | Create a folder for repositories. |
|  | cd \_repos | Navigate into the folder. |
|  | ls | List files in the directory. |
|  | git config --global user.name "Your Name" | Set your Git username (first-time setup). |
|  | git config --global user.email "your.email@example.com" | Set your Git email address (first-time setup). |
| Clone Repository | git clone <repository-URL> | Clone a repository from GitHub to your local machine. |
|  | cd <repository-folder-name> | Navigate into the cloned repository. |
| Add/Edit Files | New-Item "filename.txt" | Create a new file in the repository folder. |
|  | notepad "filename.txt" | Open the file for editing in Notepad. |
|  | git add . | Stage all new and modified files for the next commit. |
|  | git status | Check the repository status (staged, unstaged, or untracked files). |
| Commit Changes | git commit -m "Your commit message" | Commit the staged changes with a descriptive message. |
| Push Changes | git push | Push commits to the remote repository on GitHub. |
| Pull Updates | git pull | Fetch and merge updates from the remote repository into your local copy. |
| Optional: Moving/Copying Files | Move-Item -Path "C:\path\_to\_your\_project" -Destination "C:\my\_repos\<repository-folder-name>" -Recurse | Move a folder of programming files into your repository. |
|  | Copy-Item -Path "C:\path\_to\_your\_project" -Destination "C:\my\_repos\<repository-folder-name>" -Recurse | Copy a folder of programming files into your repository. |
| Helpful Commands | git branch | View the current branch. |
|  | git log | View commit history. |
|  | git restore --staged filename.txt | Unstage a file accidentally added. |
|  | git restore filename.txt | Discard changes in a file. |
|  | .gitignore | Add unnecessary files or patterns to ignore (e.g., \*.log, .vs/, \*.db). |
| Workflow Summary | git clone <repository-URL> | Clone your repository. |
|  | New-Item, git add . | Add files. |
|  | git commit -m "message" | Commit changes. |
|  | git push | Push to GitHub. |
|  | git pull | Pull updates. |