Git Cheat Sheet - Beginner Workflow

1. First-Time Setup

```
git --version
git config --global user.name "Your Name"
git config --global user.email "you@email.com"
git config --list
```

2. Initialize Repository

```
git init
git status
git add .
git commit -m "Initial commit"
git log --oneline
```

3. Connect to GitHub

```
git remote -v
git remote add origin https://github.com/<user>/<repo>.git
git push -u origin main
```

4. Daily Sync Commands

```
git pull
git push
git diff
```

5. Branching Workflow

```
git branch
git checkout -b feature/login
git add .
git commit -m "Add login feature"
git checkout main
git merge feature/login
git branch -d feature/login
```

6. Tags (Release Marking)

```
git tag v1.0.0
git tag -a v1.0.0 -m "Release v1.0.0"
git push --tags
git tag
```

7. Mental Model Takeaways

```
- Working Directory → Staging → Commit
- Branch per feature
- Merge back to main
- Push to remote (origin) to sync
- Tag important releases
```