Creating Snapshots

Initializing a repository

```
git init
```

Staging files

```
git add file1.js          # Stages a single file
git add file1.js file2.js # Stages multiple files
git add *.js              # Stages with a pattern
git add .                 # Stages the current directory and all its content
```

Viewing the status

```
git status                # Full status
git status -s             # Short status
```

Committing the staged files

```
git commit -m “Message”   # Commits with a one-line message
git commit                # Opens the default editor to type a long message
```

Skipping the staging area

```
git commit -am “Message”
```

Removing files

```
git rm file1.js           # Removes from working directory and staging area
git rm --cached file1.js  # Removes from staging area only
```

Renaming or moving files

```
git mv file1.js file1.txt
```

Viewing the staged/unstaged changes

```
git diff                # Shows unstaged changes
git diff --staged       # Shows staged changes
git diff --cached       # Same as the above
```

Viewing the history

```
git log                 # Full history
git log --oneline       # Summary
git log --reverse       # Lists the commits from the oldest to the newest
```

Viewing a commit

```
git show 921a2ff        # Shows the given commit
git show HEAD           # Shows the last commit
git show HEAD~2         # Two steps before the last commit
git show HEAD:file.js   # Shows the version of file.js stored in the last commit
```

Unstaging files (undoing git add)

```
git restore --staged file.js   # Copies the last version of file.js from repo to index
```

Discarding local changes

```
git restore file.js            # Copies file.js from index to working directory
git restore file1.js file2.js  # Restores multiple files in working directory
git restore .                  # Discards all local changes (except untracked files)
git clean -fd                  # Removes all untracked files
```

Restoring an earlier version of a file

```
git restore --source=HEAD~2 file.js
```