

Git Punishment

▼ Q: Write all initialization commands in detailed: need syntax, need explanation, needs screenshot, upload on Github and share Github link.

1. Create a New Git RepositoryCommand:Explanation:

This command establishes a new, empty Git repository within your current directory. It generates a

`.git/` folder that will monitor changes in the project. This is applicable when initiating a new project or when you wish to implement version control for an existing directory.

```
git init
```

2. Duplicate an Existing RepositoryCommand:

```
git clone <repository-url>
```

Explanation:

This command retrieves a copy of an existing Git repository (from platforms such as GitHub or Bitbucket) to your local system. Substitute `<repository-url>` with the actual URL of the repository. It also configures a link to the remote repository for the purpose of pushing and pulling updates.

Example:

```
git clone <https://github.com/user/repo.git>
```

3. Stage Files for CommitCommand (specific file):

```
git add <file>
```

Command (all files):

```
git add .
```

Explanation:

Prior to committing, files must be staged. The command

`git add <file>` stages a particular file, whereas `git add .` stages all modified files within the current directory.

Example:

```
git add index.html  
git add .
```

4. Review the Repository StatusCommand:

```
git status
```

Explanation:

This command provides an overview of the current status of the working directory and the staging area. It indicates which files are ready for commit, which have modifications that are not yet staged, and whether there are any untracked files.

Example Output:

```
On branch main  
Your branch is up to date with 'origin/main'.  
  
Changes to be committed:  
  (use "git reset HEAD <file>..." to unstage)  
    new file:   index.html  
  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
    README.md
```

5. Record ChangesCommand:

```
git commit -m "<commit-message>"
```

Screenshot

```
[saumya@Saumyas-MacBook-Air Desktop % cd 003
[saumya@Saumyas-MacBook-Air 003 % clear

[saumya@Saumyas-MacBook-Air 003 % git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/saumya/Desktop/003/.git/
[saumya@Saumyas-MacBook-Air 003 % nano saumya.py
[saumya@Saumyas-MacBook-Air 003 % git add saumya.py
[saumya@Saumyas-MacBook-Air 003 % git add .
[saumya@Saumyas-MacBook-Air 003 % git commit -m "first commit"
[master (root-commit) 27a5466] first commit
  Committer: Saumya <saumya@Saumyas-MacBook-Air.local>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:

    git config --global user.name "Your Name"
    git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 1 insertion(+)
create mode 100644 saumya.py
[saumya@Saumyas-MacBook-Air 003 % git branch -M main
[saumya@Saumyas-MacBook-Air 003 % git remote add origin https://github.com/Saumya-ch-100/003.git
[saumya@Saumyas-MacBook-Air 003 % git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 243 bytes | 243.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Saumya-ch-100/003.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

▼ Q: Create 5 different directories with the help of Github command: need screenshot, need command description, refer Github documentation to get works done, push the same in the previous Github link.

`mkdir one two three four five` → Creates 5 empty directory with name one, two, three, four and five.

`touch one/.gitkeep` , `touch two/.gitkeep` , `touch three/.gitkeep` , `touch four/.gitkeep` ,
`touch five/.gitkeep` → Empty `.gitkeep` file for the git to track the directory.

`git add .` → Commits all those directories.

```
[saumya@Saumyas-MacBook-Air 003 % mkdir one two three four five
[saumya@Saumyas-MacBook-Air 003 % ls
five          four          one          saumya.py    three        two
```

```
[saumya@Saumyas-MacBook-Air 003 % ls
five          four          one          saumya.py    three        two
```

```
[saumya@Saumyas-MacBook-Air 003 % touch one/.gitkeep
[saumya@Saumyas-MacBook-Air 003 % touch two/.gitkeep
[saumya@Saumyas-MacBook-Air 003 % touch three/.gitkeep
[saumya@Saumyas-MacBook-Air 003 % touch four/.gitkeep
[saumya@Saumyas-MacBook-Air 003 % touch five/.gitkeep
[saumya@Saumyas-MacBook-Air 003 % cd one
[saumya@Saumyas-MacBook-Air one % ls
[saumya@Saumyas-MacBook-Air one % cd ..
[saumya@Saumyas-MacBook-Air 003 % git add .
[saumya@Saumyas-MacBook-Air 003 % git commit -m "Added 5 dir"
[main 404e8ed] Added 5 dir
Committer: Saumya <saumya@Saumyas-MacBook-Air.local>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:
```

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

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
5 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 five/.gitkeep
create mode 100644 four/.gitkeep
create mode 100644 one/.gitkeep
create mode 100644 three/.gitkeep
create mode 100644 two/.gitkeep
[saumya@Saumyas-MacBook-Air 003 % git push -u origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 353 bytes | 353.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Saumya-ch-100/003.git
27a5466..404e8ed main -> main
branch 'main' set up to track 'origin/main'.
```