List all the git commands

1. Basic Git Commands

- git init: Initialize a new Git repository.

- git clone <repository-url>: Clone a repository from a remote source.

- git status: Check the status of your working directory and staging area.

- git add <file>: Add a file to the staging area.

- git add .: Add all changes in the current directory to the staging area.

- git commit -m "message": Commit staged changes with a descriptive message.

- git commit --amend: Modify the last commit message or add changes.

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2. Branching and Merging

- git branch: List all branches.

- git branch <branch-name>: Create a new branch.

- git branch -d <branch-name>: Delete a branch.

- git checkout <branch-name>: Switch to another branch.

- git checkout -b <branch-name>: Create and switch to a new branch.

- git merge <branch-name>: Merge another branch into the current branch.

- git rebase <branch-name>: Reapply commits on top of another branch.

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3. Remote Repositories

- git remote -v: List all remote repositories.

- git remote add <name> <url>: Add a remote repository.

- git pull: Fetch and merge changes from a remote repository.

- git push: Push changes to a remote repository.

- git push origin <branch-name>: Push a specific branch to the remote.

- git fetch: Download updates from a remote repository without merging.

- git remote remove <name>: Remove a remote repository.

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4. Viewing History

- git log: View commit history.

- git log --oneline: View commit history in a single-line format.

- git log --graph: View history as a graph.

- git diff: View unstaged changes.

- git diff <commit>: View changes compared to a specific commit.

- git diff <branch-name>: Compare changes with another branch.

5. Undoing Changes

- git reset <file>: Unstage a file.

- git reset --hard: Reset the working directory and staging area to the last commit.

- git revert <commit>: Create a new commit to undo a specific commit.

- git checkout <file>: Discard changes in a file.

6. Stashing Changes

- git stash: Save uncommitted changes temporarily.

- git stash apply: Apply stashed changes without removing them from stash.

- git stash pop: Apply stashed changes and remove them from stash.

- git stash list: List all stashed changes.

- git stash drop: Remove a specific stash.

7. Tagging

- git tag: List all tags.

- git tag <tag-name>: Create a new tag.

- git tag -a <tag-name> -m "message": Create an annotated tag.

- git push origin <tag-name>: Push a tag to the remote repository.

- git push origin --tags: Push all tags to the remote repository.

8. Collaboration

- git cherry-pick <commit>: Apply a specific commit from another branch.

- git blame <file>: Show the author and changes for each line in a file.

9. Configuration

- git config --global user.name "Your Name": Set the global username.

- git config --global user.email "your.email@example.com": Set the global email.

- git config --list: List all Git configurations.

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10. Advanced Commands

- git reflog: Show a log of references (commits, branch changes, etc.).

- git bisect: Perform binary search to find a commit that introduced a bug.

- git submodule: Manage submodules in a repository.

- git archive: Create an archive of a Git repository.

- git clean -f: Remove untracked files from the working directory.

```
mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (main)
$ git init
Initialized empty Git repository in C:/Users/mkuma/OneDrive/Desktop/ManishDomain
Training/.git/

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git config --local user.name "b13user35"

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git config --local user.email "b13user35@rpsconsulting.in"

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Day1/

nothing added to commit but untracked files present (use "git add" to track)

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git add .

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git commit -m "Uploaded Day1"
[master (root-commit) 7a78e1f] Uploaded Day1
 8 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Day1/session_assignment/assignment1-ManishSingh.pdf
 create mode 100644 Day1/session_assignment/assignment1.pdf
 create mode 100644 Day1/session_assignment/assignment2.pdf
 create mode 100644 Day1/session_assignment/assignment3.pdf
 create mode 100644 Day1/session_task/cah.docx
 create mode 100644 Day1/session_task/cah.pdf
 create mode 100644 Day1/session_task/can.pdf
 create mode 100644 Day1/session_task/cas.pdf

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git remote set-url origin https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git
error: No such remote 'origin'
```

```
mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git remote -v

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git push -u origin master
fatal: 'origin' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git remote set-url origin https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git
error: No such remote 'origin'

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ ^C

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git remote add origin https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git remote -v
origin  https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git (fetch)
origin  https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git (push)

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git push -u origin master
fatal: unable to connect to cache daemon: Unknown error
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 12 threads
Compressing objects: 100% (12/12), done.
Writing objects: 100% (13/13), 1.50 MiB | 23.97 MiB/s, done.
Total 13 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Day2to3/
        Day4to6/

nothing added to commit but untracked files present (use "git add" to track)
```

```
mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git add Day2to3/

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git commit -m "Uploaded Day2to3"
[master 7f854aa] Uploaded Day2to3
 13 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Day2to3/Day2/session_assignment/assignment1.pdf
 create mode 100644 Day2to3/Day2/session_assignment/assignment2.pdf
 create mode 100644 Day2to3/Day2/session_assignment/assignment3.docx
 create mode 100644 Day2to3/Day2/session_assignment/assignment3.pdf
 create mode 100644 Day2to3/Day2/session_assignment/assignment4.docx
 create mode 100644 Day2to3/Day2/session_assignment/assignment4.pdf
 create mode 100644 Day2to3/Day2/session_task/task1.xlsx
 create mode 100644 Day2to3/Day2/session_task/task2.pdf
 create mode 100644 Day2to3/Day2/session_task/task3.pdf
 create mode 100644 Day2to3/Day3/session_assignment/assignment1.pdf
 create mode 100644 Day2to3/Day3/session_assignment/assignment2.pdf
 create mode 100644 Day2to3/Day3/session_task/task1.pdf
 create mode 100644 Day2to3/Day3/session_task/task2.pdf

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git push
fatal: unable to connect to cache daemon: Unknown error
Enumerating objects: 23, done.
Counting objects: 100% (23/23), done.
Delta compression using up to 12 threads
Compressing objects: 100% (22/22), done.
Writing objects: 100% (22/22), 1.36 MiB | 20.84 MiB/s, done.
Total 22 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://gitlab.rpsconsulting.in/b13user35/ManishDTA.git
   7a78e1f..7f854aa  master -> master

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git log
commit 7f854aa98e87d01f75a0c3972bd9fd3066ca771a (HEAD -> master, origin/master)
Author: b13user35 <b13user35@rpsconsulting.in>
Date:   Sat Dec 14 22:10:41 2024 +0530

    Uploaded Day2to3

commit 7a78e1f113d31950e120a3bf7950f0f8376c1caa
Author: b13user35 <b13user35@rpsconsulting.in>
Date:   Sat Dec 14 21:49:17 2024 +0530

    Uploaded Day1

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git log --oneline
7f854aa (HEAD -> master, origin/master) Uploaded Day2to3
7a78e1f Uploaded Day1
```

```
mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git diff 7a78e1f
diff --git a/Day2to3/Day2/session_assignment/assignment1.pdf b/Day2to3/Day2/session_assignment/assignment1.pdf
new file mode 100644
diff --git a/Day2to3/Day2/session_assignment/assignment1.pdf b/Day2to3/Day2/session_assignment/assignment1.pdf
new file mode 100644
index 0000000..926306f
--- /dev/null
+++ b/Day2to3/Day2/session_assignment/assignment1.pdf
@@ -0,0 +1,61 @@
+Assignment 1: SDLC Overview - Create a one-page infographic that outlines the SDLC phases
+(Requirements, Design, Implementation, Testing, Deployment), highlighting the importance of each
+phase and how they interconnect.
+
+Title:
+"Software Development Life Cycle (SDLC) - Overview"
+Layout Suggestions:
+Use a circular flow chart, vertical timeline, or step-ladder design to show the progression and
+interconnection between the phases.
+Content for Each Phase:
+
+    1. Requirements:
+           o Icon: Clipboard or checklist.
+           o Key Message: "Defining WHAT the system must do."
+           o Importance: Ensures the project meets business needs and user expectations.
+           o Outputs: Software Requirements Specification (SRS), Use Cases.
+
+    2. Design:
+           o Icon: Blueprint or UI wireframe.
+           o Key Message: "Mapping out HOW the system will work."
+           o Importance: Translates requirements into architecture and components.
+           o Outputs: System Architecture, Data Models, Prototypes.
+
+    3. Implementation:
+           o Icon: Code symbol (e.g., </>).
+           o Key Message: "Turning plans into code."
+           o Importance: Builds the actual product based on design specifications.
+           o Outputs: Source Code, Compiled Applications.
+
+    4. Testing:
+           o Icon: Bug symbol or magnifying glass.
+           o Key Message: "Ensuring the system works as intended."
+           o Importance: Detects and fixes defects, ensuring quality and reliability.
+           o Outputs: Test Cases, Bug Reports, Validated Software.
+
+    5. Deployment:
+           o Icon: Cloud upload or rocket.
+           o Key Message: "Delivering the software to users."
+           o Importance: Makes the system available for use and monitors its performance.
+           o Outputs: Deployed Application, User Manuals.
+
+Connecting Arrows/Text:
```

```
MINGW64:/c/Users/mkuma/OneDrive/Desktop/ManishDomainTraining                                    —  □  ✕

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ mkdir demo

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ cd demo/

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining/demo (master)
$ touch demo.txt

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining/demo (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        ./

nothing added to commit but untracked files present (use "git add" to track)

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining/demo (master)
$ cd ..

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        demo/

nothing added to commit but untracked files present (use "git add" to track)

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git add .

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git commit -m "Uploaded demo"
[master 614af53] Uploaded demo
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 demo/demo.txt

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
```

```
MINGW64:/c/Users/mkuma/OneDrive/Desktop/ManishDomainTraining                                    —  □  ✕

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git log
commit 614af535afcf4e4ccaae8ea6df5af3eb2d488ddb (HEAD -> master)
Author: b13user35 <b13user35@rpsconsulting.in>
Date:   Sat Dec 14 22:16:31 2024 +0530

    Uploaded demo

commit d1aa3a95496536315244a43fd7c34c6a38ad329b (origin/master)
Author: b13user35 <b13user35@rpsconsulting.in>
Date:   Sat Dec 14 22:14:13 2024 +0530

    Uploaded Day4to6

commit 7f854aa98e87d01f75a0c3972bd9fd3066ca771a
Author: b13user35 <b13user35@rpsconsulting.in>
Date:   Sat Dec 14 22:10:41 2024 +0530

    Uploaded Day2to3

commit 7a78e1f113d31950e120a3bf7950f0f8376c1caa
Author: b13user35 <b13user35@rpsconsulting.in>
Date:   Sat Dec 14 21:49:17 2024 +0530

    Uploaded Day1

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git log --oneline
614af53 (HEAD -> master) Uploaded demo
d1aa3a9 (origin/master) Uploaded Day4to6
7f854aa Uploaded Day2to3
7a78e1f Uploaded Day1

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ ^C

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git reset 614af53

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ ls
Day1/  Day2to3/  Day4to6/  demo/
```

```
mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ rm -rf demo/

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    demo/demo.txt

no changes added to commit (use "git add" and/or "git commit -a")

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git reset 614af53
Unstaged changes after reset:
D       demo/demo.txt

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    demo/demo.txt

no changes added to commit (use "git add" and/or "git commit -a")

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git restore demo/demo.txt

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

mkuma@ManishSingh MINGW64 ~/OneDrive/Desktop/ManishDomainTraining (master)
$ git --unstagged 614af53
unknown option: --unstagged
usage: git [-v | --version] [-h | --help] [-C <path>] [-c <name>=<value>]
           [--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
           [-p | --paginate | -P | --no-pager] [--no-replace-objects] [--bare]
```