GIT COMMANDS:

1. **What does the git init command do?**
   * A) Creates a new branch
   * B) Initializes a new Git repository
   * C) Stages files for commit
   * D) Clones a remote repository
2. **Which command is used to create a copy of a remote repository on your local machine?**
   * A) git init
   * B) git clone
   * C) git add
   * D) git commit
3. **How do you stage a file named file1.txt for the next commit?**
   * A) git init file1.txt
   * B) git clone file1.txt
   * C) git add file1.txt
   * D) git commit file1.txt
4. **What is the purpose of the git commit -m "message" command?**
   * A) Initializes a new repository
   * B) Stages files for commit
   * C) Commits staged changes with a message
   * D) Displays the commit history
5. **Which command shows the status of the repository, including staged, unstaged, and untracked files?**
   * A) git log
   * B) git status
   * C) git diff
   * D) git push
6. **How do you display the commit history of the repository?**
   * A) git status
   * B) git log
   * C) git diff
   * D) git add
7. **What does the git diff command do?**
   * A) Shows the commit history
   * B) Stages files for commit
   * C) Displays changes between files in the working directory and the index
   * D) Initializes a new repository
8. **Which command is used to push local commits to the remote repository?**
   * A) git pull
   * B) git push
   * C) git fetch
   * D) git merge
9. **How do you create a new branch named new-feature?**
   * A) git branch new-feature
   * B) git checkout new-feature
   * C) git merge new-feature
   * D) git add new-feature
10. **What does the git reset --hard command do?**
    * A) Stages files for commit
    * B) Resets the working directory and index to the state of the last commit
    * C) Displays the commit history
    * D) Creates a new branch

Got it! Here are more multiple-choice questions based on the Git commands you provided:

1. **Which command is used to remove a file from both the working directory and the staging area?**
   * A) git rm
   * B) git reset
   * C) git clean
   * D) git stash
2. **How do you apply a specific commit from another branch to the current branch?**
   * A) git revert
   * B) git cherry-pick
   * C) git merge
   * D) git rebase
3. **What does the git stash command do?**
   * A) Commits changes
   * B) Stages files for commit
   * C) Temporarily saves changes that are not yet ready to be committed
   * D) Displays the commit history
4. **Which command is used to list all local branches in the repository?**
   * A) git branch
   * B) git checkout
   * C) git merge
   * D) git log
5. **How do you revert the changes of a specific commit by creating a new commit that undoes it?**
   * A) git reset
   * B) git revert
   * C) git cherry-pick
   * D) git bisect
6. **What is the purpose of the git fetch command?**
   * A) Merges changes from the remote repository into the current branch
   * B) Retrieves updates from the remote repository but does not automatically merge them
   * C) Stages files for commit
   * D) Displays the commit history
7. **Which command allows you to modify the most recent commit?**
   * A) git commit --amend
   * B) git reset
   * C) git revert
   * D) git cherry-pick
8. **How do you create a new branch and switch to it in one command?**
   * A) git branch <branch name>
   * B) git checkout <branch name>
   * C) git checkout -b <branch name>
   * D) git merge <branch name>
9. **What does the git clean -f command do?**
   * A) Stages files for commit
   * B) Removes untracked files from the working directory
   * C) Displays the commit history
   * D) Creates a new branch
10. **Which command shows the differences between two commits?**
    * A) git diff
    * B) git log
    * C) git status
    * D) git show
11. **How do you add a new submodule to the project?**
    * A) git submodule add <url> <path>
    * B) git submodule update
    * C) git clone <url>
    * D) git fetch <url>
12. **What is the purpose of the git reflog command?**
    * A) Displays the commit history as a graph
    * B) Shows the history of changes to the tip of branches
    * C) Stages files for commit
    * D) Resets the working directory
13. **Which command is used to force the push to overwrite the remote history?**
    * A) git push --force
    * B) git pull --rebase
    * C) git fetch
    * D) git merge
14. **How do you list the remote repositories associated with the current repository?**
    * A) git remote -v
    * B) git remote add
    * C) git remote remove
    * D) git fetch
15. **What does the git bisect command do?**
    * A) Stages files for commit
    * B) Displays the commit history
    * C) A binary search tool used to find which commit introduced a bug
    * D) Merges changes from another branch
16. **How do you remove a remote repository by name?**
    * A) git remote add
    * B) git remote remove
    * C) git fetch
    * D) git merge
17. **Which command is used to update submodules to match the commit specified in the main repository?**
    * A) git submodule add
    * B) git submodule update
    * C) git fetch
    * D) git merge
18. **What does the git show <commit\_id> command do?**
    * A) Displays detailed information about a specific commit
    * B) Shows the differences between two commits
    * C) Lists all local branches
    * D) Stages files for commit
19. **How do you temporarily save changes that are not yet ready to be committed?**
    * A) git stash
    * B) git commit
    * C) git add
    * D) git reset
20. **Which command is used to restore changes from the stash and remove them from the stash list?**
    * A) git stash
    * B) git stash pop
    * C) git reset
    * D) git revert
21. **How do you initialize a new Git repository in the current directory?**
    * A) git clone
    * B) git init
    * C) git add
    * D) git commit
22. **What is the purpose of the git remote add command?**
    * A) Lists remote repositories
    * B) Adds a new remote repository
    * C) Removes a remote repository
    * D) Fetches updates from a remote repository
23. **Which command is used to fetch changes from the remote repository and merge them into the current branch?**
    * A) git pull
    * B) git push
    * C) git fetch
    * D) git merge
24. **How do you stage all changes in the current directory for the next commit?**
    * A) git add .
    * B) git commit -m "message"
    * C) git status
    * D) git log
25. **What does the git log --graph command do?**
    * A) Displays the commit history as a graph
    * B) Shows the differences between files
    * C) Lists all local branches
    * D) Stages files for commit
26. **Which command is used to merge changes from the specified branch into the current branch?**
    * A) git branch
    * B) git checkout
    * C) git merge
    * D) git add
27. **How do you unstages a file that was previously added, returning it to the untracked state?**
    * A) git reset <filename>
    * B) git rm <filename>
    * C) git stash
    * D) git revert
28. **What is the purpose of the git pull --rebase command?**
    * A) Fetches changes from the remote repository and merges them into the current branch
    * B) Pulls changes from the remote repository and rebases the current branch instead of merging
    * C) Stages files for commit
    * D) Displays the commit history
29. **Which command is used to display detailed information about a specific commit, including changes and commit message?**
    * A) git show <commit\_id>
    * B) git log
    * C) git diff
    * D) git status
30. **How do you create a new branch in the repository?**
    * A) git branch <branch name>
    * B) git checkout <branch name>
    * C) git merge <branch name>
    * D) git add <branch name>
31. **What does the git remote -v command do?**
    * A) Lists all local branches
    * B) Lists remote repositories associated with the current repository
    * C) Adds a new remote repository
    * D) Removes a remote repository
32. **Which command is used to remove untracked files from the working directory?**
    * A) git clean -f
    * B) git reset --hard
    * C) git rm <file>
    * D) git stash
33. **How do you apply a specific commit from another branch to the current branch?**
    * A) git revert <commit\_id>
    * B) git cherry-pick <commit\_id>
    * C) git merge <branch name>
    * D) git rebase <branch name>
34. **What is the purpose of the git reset --hard command?**
    * A) Stages files for commit
    * B) Resets the working directory and index to the state of the last commit
    * C) Displays the commit history
    * D) Creates a new branch
35. **Which command allows you to modify the most recent commit, either changing the commit message or adding files to it?**
    * A) git commit --amend
    * B) git reset
    * C) git revert
    * D) git cherry-pick

Great! Let's continue with more questions:

1. **How do you create a new branch and switch to it in one command?**
   * A) git branch <branch name>
   * B) git checkout <branch name>
   * C) git checkout -b <branch name>
   * D) git merge <branch name>
2. **What does the git cherry-pick command do?**
   * A) Reverts changes of a specific commit
   * B) Applies a specific commit from another branch to the current branch
   * C) Merges changes from another branch
   * D) Stages files for commit
3. **Which command is used to display the commit history as a graph?**
   * A) git log
   * B) git log --graph
   * C) git reflog
   * D) git status
4. **How do you list all local branches in the repository?**
   * A) git branch
   * B) git checkout
   * C) git merge
   * D) git add
5. **What is the purpose of the git revert command?**
   * A) Stages files for commit
   * B) Reverts the changes of a specific commit by creating a new commit that undoes it
   * C) Displays the commit history
   * D) Creates a new branch
6. **Which command is used to fetch changes from the remote repository and merge them into the current branch?**
   * A) git pull
   * B) git push
   * C) git fetch
   * D) git merge
7. **How do you stage all changes in the current directory for the next commit?**
   * A) git add .
   * B) git commit -m "message"
   * C) git status
   * D) git log
8. **What does the git log --graph command do?**
   * A) Displays the commit history as a graph
   * B) Shows the differences between files
   * C) Lists all local branches
   * D) Stages files for commit
9. **Which command is used to merge changes from the specified branch into the current branch?**
   * A) git branch
   * B) git checkout
   * C) git merge
   * D) git add
10. **How do you unstage a file that was previously added, returning it to the untracked state?**
    * A) git reset <filename>
    * B) git rm <filename>
    * C) git stash
    * D) git revert
11. **What is the purpose of the git pull --rebase command?**
    * A) Fetches changes from the remote repository and merges them into the current branch
    * B) Pulls changes from the remote repository and rebases the current branch instead of merging
    * C) Stages files for commit
    * D) Displays the commit history
12. **Which command is used to display detailed information about a specific commit, including changes and commit message?**
    * A) git show <commit\_id>
    * B) git log
    * C) git diff
    * D) git status

sGot it! Here are the questions rewritten with the choices and the correct answer option included:

**git init**

1. **What is the first step to start tracking a project with Git?**
   * A) git clone
   * B) git init (Answer)
   * C) git add
   * D) git commit
2. **Which command creates a .git directory in your project?**
   * A) git init (Answer)
   * B) git clone
   * C) git status
   * D) git log
3. **What does the git init command initialize?**
   * A) A new branch
   * B) A new commit
   * C) A new repository (Answer)
   * D) A new remote

**git clone**

1. **How do you create a local copy of a remote repository?**
   * A) git init
   * B) git clone (Answer)
   * C) git add
   * D) git commit
2. **Which command includes all branches, history, and configuration settings from a remote repository?**
   * A) git init
   * B) git clone (Answer)
   * C) git fetch
   * D) git pull
3. **What is the correct syntax to clone a repository from GitHub?**
   * A) git clone <Remote Repository URL> (Answer)
   * B) git init <Remote Repository URL>
   * C) git fetch <Remote Repository URL>
   * D) git pull <Remote Repository URL>

**git add**

1. **How do you stage a file named file1.txt for the next commit?**
   * A) git init file1.txt
   * B) git clone file1.txt
   * C) git add file1.txt (Answer)
   * D) git commit file1.txt
2. **Which command stages all changes in the current directory?**
   * A) git add . (Answer)
   * B) git commit -m "message"
   * C) git status
   * D) git log
3. **What is the purpose of the git add command?**
   * A) To initialize a new repository
   * B) To stage changes for the next commit (Answer)
   * C) To commit changes to the repository
   * D) To display the commit history

**git commit**

1. **How do you commit staged changes with a message?**
   * A) git add -m "message"
   * B) git commit -m "message" (Answer)
   * C) git push -m "message"
   * D) git pull -m "message"
2. **Which command commits the staged changes to the repository?**
   * A) git add
   * B) git commit (Answer)
   * C) git push
   * D) git pull
3. **What is the correct syntax to commit changes with a message "Initial commit"?**
   * A) git commit -m "Initial commit" (Answer)
   * B) git add -m "Initial commit"
   * C) git push -m "Initial commit"
   * D) git pull -m "Initial commit"

**git status**

1. **Which command shows the status of the repository, including staged, unstaged, and untracked files?**
   * A) git log
   * B) git status (Answer)
   * C) git diff
   * D) git push
2. **How do you check the current state of the working directory and staging area?**
   * A) git log
   * B) git status (Answer)
   * C) git diff
   * D) git add
3. **What information does the git status command provide?**
   * A) Commit history
   * B) Staged, unstaged, and untracked files (Answer)
   * C) Differences between commits
   * D) Remote repository URLs

**git log**

1. **How do you display the commit history of the repository?**
   * A) git status
   * B) git log (Answer)
   * C) git diff
   * D) git add
2. **Which command shows detailed information like author, date, and commit message for each commit?**
   * A) git status
   * B) git log (Answer)
   * C) git diff
   * D) git add
3. **What is the purpose of the git log command?**
   * A) To stage files for commit
   * B) To display the commit history (Answer)
   * C) To initialize a new repository
   * D) To clone a repository

**git diff**

1. **Which command shows the changes between files in the working directory and the index?**
   * A) git log
   * B) git status
   * C) git diff (Answer)
   * D) git add
2. **How do you view the differences between the working directory and the staging area?**
   * A) git log
   * B) git status
   * C) git diff (Answer)
   * D) git add
3. **What is the purpose of the git diff command?**
   * A) To display the commit history
   * B) To show changes between files (Answer)
   * C) To stage files for commit
   * D) To initialize a new repository

**git remote add**

1. **How do you add a new remote repository?**
   * A) git remote add <name> <URL> (Answer)
   * B) git remote remove <name>
   * C) git fetch <name>
   * D) git pull <name>
2. **Which command associates a remote repository with the current repository?**
   * A) git remote add (Answer)
   * B) git remote remove
   * C) git fetch
   * D) git pull
3. **What is the correct syntax to add a remote repository named origin?**
   * A) git remote add origin <URL> (Answer)
   * B) git remote remove origin <URL>
   * C) git fetch origin <URL>
   * D) git pull origin <URL>

**git push**

1. **How do you push local commits to the remote repository?**
   * A) git pull
   * B) git push (Answer)
   * C) git fetch
   * D) git merge
2. **Which command updates the remote branch with the latest changes from the local branch?**
   * A) git pull
   * B) git push (Answer)
   * C) git fetch
   * D) git merge
3. **What is the correct syntax to push changes to the remote repository?**
   * A) git push -u <Remote Repository URL> (Answer)
   * B) git pull -u <Remote Repository URL>
   * C) git fetch -u <Remote Repository URL>
   * D) git merge -u <Remote Repository URL>

**git pull**

1. **How do you fetch changes from the remote repository and merge them into the current branch?**
   * A) git pull (Answer)
   * B) git push
   * C) git fetch
   * D) git merge
2. **Which command combines fetching and merging changes from the remote repository?**
   * A) git pull (Answer)
   * B) git push
   * C) git fetch
   * D) git merge
3. **What is the correct syntax to pull changes from the remote repository?**
   * A) git pull <Remote Repository URL> (Answer)
   * B) git push <Remote Repository URL>
   * C) git fetch <Remote Repository URL>
   * D) git merge <Remote Repository URL>

**git commit --amend**

1. **How do you modify the most recent commit?**
   * A) git commit --amend (Answer)
   * B) git reset
   * C) git revert
   * D) git cherry-pick
2. **Which command allows you to change the commit message of the most recent commit?**
   * A) git commit --amend (Answer)
   * B) git reset
   * C) git revert
   * D) git cherry-pick
3. **What is the purpose of the git commit --amend command?**
   * A) To modify the most recent commit (Answer)
   * B) To stage files for commit
   * C) To display the commit history
   * D) To initialize a new repository

**git fetch**

1. **How do you retrieve updates from the remote repository without merging them?**
   * A) git pull
   * B) git push
   * C) git fetch (Answer)
   * D) git merge
2. **Which command fetches changes from the remote repository but does not automatically merge them?**
   * A) git pull
   * B) git push
   * C) git fetch (Answer)
   * D) git merge

**36. What is the purpose of the git fetch command?**

* + A) To retrieve updates from the remote repository (Answer)
  + B) To stage files for commit
  + C) To display the commit history
  + D) To initialize a new repository

Sure! Here are the questions rewritten with the choices and the correct answer option included:

**git branch**

1. **How do you list all local branches in the repository?**
   * A) git branch (Answer)
   * B) git checkout
   * C) git merge
   * D) git add
2. **Which command creates a new branch named new-feature?**
   * A) git branch new-feature (Answer)
   * B) git checkout new-feature
   * C) git merge new-feature
   * D) git add new-feature
3. **What is the purpose of the git branch command?**
   * A) To list all local branches
   * B) To create a new branch
   * C) Both A and B (Answer)
   * D) To stage files for commit

**git checkout**

1. **How do you switch to an existing branch named new-feature?**
   * A) git branch new-feature
   * B) git checkout new-feature (Answer)
   * C) git merge new-feature
   * D) git add new-feature
2. **Which command creates a new branch and switches to it?**
   * A) git branch <branch name>
   * B) git checkout <branch name>
   * C) git checkout -b <branch name> (Answer)
   * D) git merge <branch name>
3. **What is the correct syntax to switch to a branch named feature-branch?**
   * A) git branch feature-branch
   * B) git checkout feature-branch (Answer)
   * C) git merge feature-branch
   * D) git add feature-branch

**git merge**

1. **How do you merge changes from the new-feature branch into the current branch?**
   * A) git branch new-feature
   * B) git checkout new-feature
   * C) git merge new-feature (Answer)
   * D) git add new-feature
2. **Which command combines the changes from one branch into another?**
   * A) git branch
   * B) git checkout
   * C) git merge (Answer)
   * D) git add
3. **What is the purpose of the git merge command?**
   * A) To create a new branch
   * B) To switch to a branch
   * C) To combine changes from one branch into another (Answer)
   * D) To stage files for commit

**git clean**

1. **How do you remove untracked files from the working directory?**
   * A) git clean -f (Answer)
   * B) git reset --hard
   * C) git rm <file>
   * D) git stash
2. **Which command is used to clean up the working directory by removing untracked files?**
   * A) git clean -f (Answer)
   * B) git reset --hard
   * C) git rm <file>
   * D) git stash
3. **What is the purpose of the git clean -f command?**
   * A) To stage files for commit
   * B) To remove untracked files (Answer)
   * C) To display the commit history
   * D) To initialize a new repository

**git cherry-pick**

1. **How do you apply a specific commit from another branch to the current branch?**
   * A) git revert <commit\_id>
   * B) git cherry-pick <commit\_id> (Answer)
   * C) git merge <branch name>
   * D) git rebase <branch name>
2. **Which command applies a specific commit from another branch to the current branch?**
   * A) git revert
   * B) git cherry-pick (Answer)
   * C) git merge
   * D) git rebase
3. **What is the correct syntax to cherry-pick a commit with ID a1b2c3d4?**
   * A) git cherry-pick a1b2c3d4 (Answer)
   * B) git revert a1b2c3d4
   * C) git merge a1b2c3d4
   * D) git rebase a1b2c3d4

**git revert**

1. **How do you revert the changes of a specific commit by creating a new commit that undoes it?**
   * A) git reset
   * B) git revert (Answer)
   * C) git cherry-pick
   * D) git bisect
2. **Which command creates a new commit that undoes the changes of a specific commit?**
   * A) git reset
   * B) git revert (Answer)
   * C) git cherry-pick
   * D) git bisect
3. **What is the correct syntax to revert a commit with ID a1b2c3d4?**
   * A) git revert a1b2c3d4 (Answer)
   * B) git reset a1b2c3d4
   * C) git cherry-pick a1b2c3d4
   * D) git bisect a1b2c3d4

**git bisect**

1. **How do you start a binary search to find which commit introduced a bug?**
   * A) git bisect start (Answer)
   * B) git bisect bad
   * C) git bisect good
   * D) git bisect end
2. **Which command marks the current commit as bad during a bisect session?**
   * A) git bisect start
   * B) git bisect bad (Answer)
   * C) git bisect good
   * D) git bisect end
3. **What is the purpose of the git bisect command?**
   * A) To stage files for commit
   * B) To display the commit history
   * C) To find which commit introduced a bug (Answer)
   * D) To merge changes from another branch

**git reset**

1. **How do you unstage a file that was previously added, returning it to the untracked state?**
   * A) git reset <filename> (Answer)
   * B) git rm <filename>
   * C) git stash
   * D) git revert
2. **Which command resets the working directory and index to the state of the last commit, discarding any uncommitted changes?**
   * A) git reset --hard (Answer)
   * B) git clean -f
   * C) git rm <file>
   * D) git stash
3. **What is the correct syntax to unstage a file named add1.txt?**
   * A) git reset add1.txt (Answer)
   * B) git rm add1.txt
   * C) git stash add1.txt
   * D) git revert add1.txt

**git rm**

1. **How do you remove a file from both the working directory and the staging area?**
   * A) git rm <file> (Answer)
   * B) git reset <file>
   * C) git stash <file>
   * D) git revert <file>
2. **Which command removes a file from the working directory and the staging area?**
   * A) git rm <file> (Answer)
   * B) git reset <file>
   * C) git stash <file>
   * D) git revert <file>
3. **What is the correct syntax to remove a file named file1.txt?**
   * A) git rm file1.txt (Answer)
   * B) git reset file1.txt
   * C) git stash file1.txt
   * D) git revert file1.txt

**git show**

1. **How do you display detailed information about a specific commit?**
   * A) git show <commit\_id> (Answer)
   * B) git log
   * C) git diff
   * D) git status
2. **Which command shows detailed information about a specific commit, including changes and commit message?**
   * A) git show <commit\_id> (Answer)
   * B) git log
   * C) git diff
   * D) git status
3. **What is the correct syntax to show details of a commit with ID a1b2c3d4?**
   * A) git show a1b2c3d4 (Answer)
   * B) git log a1b2c3d4
   * C) git diff a1b2c3d4
   * D) git status a1b2c3d4

**git diff <commit\_id\_1> <commit\_id\_2>**

Sure! Here are the questions rewritten with the choices and the correct answer option included:

**git diff <commit\_id\_1> <commit\_id\_2>**

1. **How do you show the differences between two commits?**
   * A) git diff <commit\_id\_1> <commit\_id\_2> (Answer)
   * B) git log <commit\_id\_1> <commit\_id\_2>
   * C) git show <commit\_id\_1> <commit\_id\_2>
   * D) git status <commit\_id\_1> <commit\_id\_2>
2. **Which command shows the differences between two specific commits?**
   * A) git diff <commit\_id\_1> <commit\_id\_2> (Answer)
   * B) git log <commit\_id\_1> <commit\_id\_2>
   * C) git show <commit\_id\_1> <commit\_id\_2>
   * D) git status <commit\_id\_1> <commit\_id\_2>
3. **What is the correct syntax to compare commits a1b2c3d4 and a2b3c4d5?**
   * A) git diff a1b2c3d4 a2b3c4d5 (Answer)
   * B) git log a1b2c3d4 a2b3c4d5
   * C) git show a1b2c3d4 a2b3c4d5
   * D) git status a1b2c3d4 a2b3c4d5

**git remote -v**

1. **How do you list the remote repositories associated with the current repository?**
   * A) git remote -v (Answer)
   * B) git remote add
   * C) git remote remove
   * D) git fetch
2. **Which command shows the URLs of remote repositories?**
   * A) git remote -v (Answer)
   * B) git remote add
   * C) git remote remove
   * D) git fetch
3. **What is the purpose of the git remote -v command?**
   * A) To list remote repositories (Answer)
   * B) To add a new remote repository
   * C) To remove a remote repository
   * D) To fetch updates from a remote repository

**git remote remove**

1. **How do you remove a remote repository by name?**
   * A) git remote add
   * B) git remote remove (Answer)
   * C) git fetch
   * D) git merge
2. **Which command removes a remote repository named origin?**
   * A) git remote remove origin (Answer)
   * B) git remote add origin
   * C) git fetch origin
   * D) git merge origin
3. **What is the correct syntax to remove a remote repository named SQETesting?**
   * A) git remote remove SQETesting (Answer)
   * B) git remote add SQETesting
   * C) git fetch SQETesting
   * D) git merge SQETesting

**git stash**

1. **How do you temporarily save changes that are not yet ready to be committed?**
   * A) git stash (Answer)
   * B) git commit
   * C) git add
   * D) git reset
2. **Which command temporarily saves changes to allow you to work on something else?**
   * A) git stash (Answer)
   * B) git commit
   * C) git add
   * D) git reset
3. **What is the purpose of the git stash command?**
   * A) To temporarily save changes (Answer)
   * B) To stage files for commit
   * C) To display the commit history
   * D) To initialize a new repository

**git stash pop**

1. **How do you restore changes from the stash and remove them from the stash list?**
   * A) git stash pop (Answer)
   * B) git stash
   * C) git reset
   * D) git revert
2. **Which command restores changes from the stash?**
   * A) git stash pop (Answer)
   * B) git stash
   * C) git reset
   * D) git revert
3. **What is the correct syntax to apply stashed changes and remove them from the stash list?**
   * A) git stash pop (Answer)
   * B) git stash
   * C) git reset
   * D) git revert

**git submodule add**

1. **How do you add a new submodule to the project?**
   * A) git submodule add <url> <path> (Answer)
   * B) git submodule update
   * C) git clone <url>
   * D) git fetch <url>
2. **Which command adds a repository within a repository?**
   * A) git submodule add (Answer)
   * B) git submodule update
   * C) git clone
   * D) git fetch
3. **What is the correct syntax to add a submodule with URL https://github.com/example/repo.git to the path submodule\_path?**
   * A) git submodule add https://github.com/example/repo.git submodule\_path (Answer)
   * B) git submodule update https://github.com/example/repo.git submodule\_path
   * C) git clone https://github.com/example/repo.git submodule\_path
   * D) git fetch https://github.com/example/repo.git submodule\_path

**git submodule update**

1. **How do you update submodules to match the commit specified in the main repository?**
   * A) git submodule update (Answer)
   * B) git submodule add
   * C) git clone
   * D) git fetch
2. **Which command updates submodules to the specified commit?**
   * A) git submodule update (Answer)
   * B) git submodule add
   * C) git clone
   * D) git fetch
3. **What is the purpose of the git submodule update command?**
   * A) To update submodules to match the commit specified in the main repository (Answer)
   * B) To add a new submodule
   * C) To clone a repository
   * D) To fetch updates from a remote repository

**git push --force**

1. **How do you force the push to overwrite the remote history?**
   * A) git push --force (Answer)
   * B) git pull --rebase
   * C) git fetch
   * D) git merge
2. **Which command should be used cautiously as it can rewrite commits?**
   * A) git push --force (Answer)
   * B) git pull --rebase
   * C) git fetch
   * D) git merge
3. **What is the correct syntax to force push changes to the remote repository?**
   * A) git push --force (Answer)
   * B) git pull --force
   * C) git fetch --force
   * D) git merge --force

**git pull --rebase**

1. **How do you pull changes from the remote repository and rebase the current branch instead of merging?**
   * A) git pull --rebase (Answer)
   * B) git push --rebase
   * C) git fetch --rebase
   * D) git merge --rebase
2. **Which command rebases the current branch with changes from the remote repository?**
   * A) git pull --rebase (Answer)
   * B) git push --rebase
   * C) git fetch --rebase
   * D) git merge --rebase
3. **What is the purpose of the git pull --rebase command?**
   * A) To pull changes and rebase the current branch (Answer)
   * B) To push changes and rebase the remote branch
   * C) To fetch changes and rebase the current branch
   * D) To merge changes and rebase the current branch

**git log --graph**

1. **How do you display the commit history as a graph?**
   * A) git log --graph (Answer)
   * B) git log
   * C) git reflog
   * D) git status
2. **Which command shows the commit history in a graphical format?**
   * A) git log --graph (Answer)
   * B) git log
   * C) git reflog
   * D) git status
3. **What is the purpose of the git log --graph command?**
   * A) To display the commit history as a graph (Answer)
   * B) To show the commit history
   * C) To show the reflog

Sure! Here are the questions rewritten with the choices and the correct answer option included:

**git reflog**

1. **How do you show the history of changes to the tip of branches?**
   * A) git reflog (Answer)
   * B) git log
   * C) git diff
   * D) git status
2. **Which command shows the history of changes to the tip of branches, even those not part of the current history?**
   * A) git reflog (Answer)
   * B) git log
   * C) git diff
   * D) git status
3. **What is the purpose of the git reflog command?**
   * A) To show the history of changes to the tip of branches (Answer)
   * B) To display the commit history
   * C) To show differences between files
   * D) To stage files for commit

**git reset --hard**

1. **How do you reset the working directory and index to the state of the last commit, discarding any uncommitted changes?**
   * A) git reset --hard (Answer)
   * B) git clean -f
   * C) git rm <file>
   * D) git stash
2. **Which command discards all uncommitted changes and resets the working directory to the last commit?**
   * A) git reset --hard (Answer)
   * B) git clean -f
   * C) git rm <file>
   * D) git stash
3. **What is the purpose of the git reset --hard command?**
   * A) To reset the working directory and index to the state of the last commit (Answer)
   * B) To stage files for commit
   * C) To display the commit history
   * D) To initialize a new repository

**git pull origin master**

1. **How do you fetch changes from the remote repository and merge them into the current branch?**
   * A) git pull origin master (Answer)
   * B) git push origin master
   * C) git fetch origin master
   * D) git merge origin master
2. **Which command fetches changes from the remote repository and merges them into the current branch?**
   * A) git pull origin master (Answer)
   * B) git push origin master
   * C) git fetch origin master
   * D) git merge origin master
3. **What is the correct syntax to pull changes from the master branch of the remote repository origin?**
   * A) git pull origin master (Answer)
   * B) git push origin master
   * C) git fetch origin master
   * D) git merge origin master

**git push origin master**

1. **How do you push local commits to the remote master branch?**
   * A) git push origin master (Answer)
   * B) git pull origin master
   * C) git fetch origin master
   * D) git merge origin master
2. **Which command updates the remote master branch with the latest changes from the local branch?**
   * A) git push origin master (Answer)
   * B) git pull origin master
   * C) git fetch origin master
   * D) git merge origin master
3. **What is the correct syntax to push changes to the master branch of the remote repository origin?**
   * A) git push origin master (Answer)
   * B) git pull origin master
   * C) git fetch origin master
   * D) git merge origin master

**git reset <filename>**

1. **How do you unstage a file named add1.txt that was previously added?**
   * A) git reset add1.txt (Answer)
   * B) git rm add1.txt
   * C) git stash add1.txt
   * D) git revert add1.txt
2. **Which command unstages a file that was previously added, returning it to the untracked state?**
   * A) git reset <filename> (Answer)
   * B) git rm <filename>
   * C) git stash <filename>
   * D) git revert <filename>
3. **What is the purpose of the git reset <filename> command?**
   * A) To unstage a file that was previously added (Answer)
   * B) To remove a file from the working directory
   * C) To stash changes
   * D) To revert changes

**git remote add origin**

1. **How do you add a remote repository named origin?**
   * A) git remote add origin <URL> (Answer)
   * B) git remote remove origin
   * C) git fetch origin
   * D) git pull origin
2. **Which command associates a remote repository named origin with the current repository?**
   * A) git remote add origin (Answer)
   * B) git remote remove origin
   * C) git fetch origin
   * D) git pull origin
3. **What is the correct syntax to add a remote repository named origin with URL https://github.com/user/repo.git?**
   * A) git remote add origin https://github.com/user/repo.git (Answer)
   * B) git remote remove origin https://github.com/user/repo.git
   * C) git fetch origin https://github.com/user/repo.git
   * D) git pull origin https://github.com/user/repo.git

**git pull --rebase <url>**

1. **How do you pull changes from a remote repository and rebase the current branch?**
   * A) git pull --rebase <url> (Answer)
   * B) git push --rebase <url>
   * C) git fetch --rebase <url>
   * D) git merge --rebase <url>
2. **Which command pulls changes from a remote repository and rebases the current branch?**
   * A) git pull --rebase <url> (Answer)
   * B) git push --rebase <url>
   * C) git fetch --rebase <url>
   * D) git merge --rebase <url>
3. **What is the correct syntax to pull changes from a remote repository with URL https://github.com/user/repo.git and rebase the current branch?**
   * A) git pull --rebase https://github.com/user/repo.git (Answer)
   * B) git push --rebase https://github.com/user/repo.git
   * C) git fetch --rebase https://github.com/user/repo.git
   * D) git merge --rebase <https://github.com/user/repo.git>

SYNTAX BASED MCQS FOR EACH COMMAND.

Yes, I've now covered all the commands you provided. Here are the syntax-type questions for each command:

**git init**

1. **What is the correct syntax to initialize a new Git repository?**
   * A) git init (Answer)
   * B) git init <repository>
   * C) git init <directory>
   * D) git init <branch>

**git clone**

1. **What is the correct syntax to clone a repository from GitHub?**
   * A) git clone <Remote Repository URL> (Answer)
   * B) git clone <directory>
   * C) git clone <branch>
   * D) git clone <repository>

**git add**

1. **What is the correct syntax to stage a file named file1.txt for the next commit?**
   * A) git add file1.txt (Answer)
   * B) git add <directory>
   * C) git add <branch>
   * D) git add <repository>
2. **What is the correct syntax to stage all changes in the current directory?**
   * A) git add . (Answer)
   * B) git add \*
   * C) git add all
   * D) git add <directory>

**git commit**

1. **What is the correct syntax to commit changes with a message "Initial commit"?**
   * A) git commit -m "Initial commit" (Answer)
   * B) git commit -a "Initial commit"
   * C) git commit -c "Initial commit"
   * D) git commit -d "Initial commit"

**git status**

1. **What is the correct syntax to show the status of the repository?**
   * A) git status (Answer)
   * B) git status <branch>
   * C) git status <directory>
   * D) git status <repository>

**git log**

1. **What is the correct syntax to display the commit history of the repository?**
   * A) git log (Answer)
   * B) git log <branch>
   * C) git log <directory>
   * D) git log <repository>

**git diff**

1. **What is the correct syntax to show the changes between files in the working directory and the index?**
   * A) git diff (Answer)
   * B) git diff <branch>
   * C) git diff <directory>
   * D) git diff <repository>

**git push**

1. **What is the correct syntax to push changes to the remote repository?**
   * A) git push -u <Remote Repository URL> (Answer)
   * B) git push <branch> <Remote Repository URL>
   * C) git push <directory> <Remote Repository URL>
   * D) git push <repository> <Remote Repository URL>

**git pull**

1. **What is the correct syntax to pull changes from the remote repository?**
   * A) git pull <Remote Repository URL> (Answer)
   * B) git pull <branch> <Remote Repository URL>
   * C) git pull <directory> <Remote Repository URL>
   * D) git pull <repository> <Remote Repository URL>

**git pull origin master**

1. **What is the correct syntax to pull changes from the master branch of the remote repository origin?**
   * A) git pull origin master (Answer)
   * B) git push origin master
   * C) git fetch origin master
   * D) git merge origin master

**git commit --amend**

1. **What is the correct syntax to amend the most recent commit?**
   * A) git commit --amend (Answer)
   * B) git commit --amend <message>
   * C) git commit --amend <branch>
   * D) git commit --amend <directory>

**git push origin master**

1. **What is the correct syntax to push changes to the master branch of the remote repository origin?**
   * A) git push origin master (Answer)
   * B) git pull origin master
   * C) git fetch origin master
   * D) git merge origin master

**git fetch**

1. **What is the correct syntax to fetch updates from the remote repository?**
   * A) git fetch (Answer)
   * B) git fetch <branch>
   * C) git fetch <directory>
   * D) git fetch <repository>

**git branch**

1. **What is the correct syntax to list all local branches in the repository?**
   * A) git branch (Answer)
   * B) git branch <directory>
   * C) git branch <repository>
   * D) git branch <branch>

**git branch <branch name>**

1. **What is the correct syntax to create a new branch named new-feature?**
   * A) git branch new-feature (Answer)
   * B) git branch <directory>
   * C) git branch <repository>
   * D) git branch <branch>

**git checkout <branch name>**

1. **What is the correct syntax to switch to a branch named feature-branch?**
   * A) git checkout feature-branch (Answer)
   * B) git checkout <directory>
   * C) git checkout <repository>
   * D) git checkout <branch>

**git checkout -b <branch name>**

1. **What is the correct syntax to create a new branch and switch to it?**
   * A) git checkout -b new-feature (Answer)
   * B) git checkout -b <directory>
   * C) git checkout -b <repository>
   * D) git checkout -b <branch>

**git merge <branch name>**

1. **What is the correct syntax to merge changes from the new-feature branch into the current branch?**
   * A) git merge new-feature (Answer)
   * B) git merge <directory>
   * C) git merge <repository>
   * D) git merge <branch>

**git clean -f**

1. **What is the correct syntax to remove untracked files from the working directory?**
   * A) git clean -f (Answer)
   * B) git clean <directory>
   * C) git clean <repository>
   * D) git clean <branch>

**git cherry-pick <commit\_id>**

1. **What is the correct syntax to cherry-pick a commit with ID a1b2c3d4?**
   * A) git cherry-pick a1b2c3d4 (Answer)
   * B) git cherry-pick <directory>
   * C) git cherry-pick <repository>
   * D) git cherry-pick <branch>

**git revert <commit\_id>**

1. **What is the correct syntax to revert a commit with ID a1b2c3d4?**
   * A) git revert a1b2c3d4 (Answer)
   * B) git revert <directory>
   * C) git revert <repository>
   * D) git revert <branch>

**git bisect**

1. **What is the correct syntax to start a binary search to find which commit introduced a bug?**
   * A) git bisect start (Answer)
   * B) git bisect <directory>
   * C) git bisect <repository>
   * D) git bisect <branch>
2. **What is the correct syntax to mark the current commit as bad during a bisect session?**
   * A) git bisect bad (Answer)
   * B) git bisect <directory>
   * C) git bisect <repository>
   * D) git bisect <branch>

**git reset <filename>**

1. **What is the correct syntax to unstage a file named add1.txt?**
   * A) git reset add1.txt (Answer)
   * B) git reset <directory>
   * C) git reset <repository>
   * D) git reset <branch>

**git reset --hard**

1. **What is the correct syntax to reset the working directory and index to the state of the last commit, discarding any uncommitted changes?**
   * A) git reset --hard (Answer)
   * B) git reset <directory>
   * C) git reset <repository>
   * D) git reset <branch>

**git rm <file>**

1. **What is the correct syntax to remove a file named file1.txt from both the working directory and the staging area?**
   * A) git rm file1.txt (Answer)
   * B) git rm <directory>
   * C) git rm <repository>
   * D) git rm <branch>

**git show <commit\_id>**

1. **What is the correct syntax to show details of a commit with ID a1b2c3d4?**
   * A) git show a1b2c3d4 (Answer)
   * B) git show <directory>
   * C) git show <repository>
   * D) git show <branch>

**git diff <commit\_id\_1> <commit\_id\_2>**

1. **What is the correct syntax to compare commits a1b2c3d4 and a2b3c4d5?**
   * A) git diff a1b2c3d4 a2b3c4d5 (Answer)
   * B) git diff <directory>
   * C) git diff <repository>
   * D) git diff <branch>

**git remote -v**

1. **What is the correct syntax to list the remote repositories associated with the current repository?**
   * A) git remote -v (Answer)
   * B) git remote add
   * C) git remote remove
   * D) git fetch

**git remote remove <name>**

1. **What is the correct syntax to remove a remote repository named SQETesting?**
   * A) git remote remove SQETesting (Answer)
   * B) git remote add SQETesting
   * C) git fetch SQETesting
   * D) git merge SQETesting

**git stash**

1. **What is the correct syntax to temporarily save changes that are not yet ready to be committed?**
   * A) git stash (Answer)
   * B) git commit
   * C) git add
   * D) git reset

**git stash pop**

1. **What is the correct syntax to apply stashed changes and remove them from the stash list?**
   * A) git stash pop (Answer)
   * B) git stash
   * C) git reset
   * D) git revert

**git submodule add <url> <path>**

1. **What is the correct syntax to add a submodule with URL https://github.com/example/repo.git to the path submodule\_path?**
   * A) git submodule add https://github.com/example/repo.git submodule\_path (Answer)
   * B) git submodule update https://github.com/example/repo.git submodule\_path
   * C) git clone https://github.com/example/repo.git submodule\_path
   * D) git fetch https://github.com/example/repo.git submodule\_path

**git submodule update**

1. **What is the correct syntax to update submodules to match the commit specified in the main repository?**
   * A) git submodule update (Answer)
   * B) git submodule add
   * C) git clone
   * D) git fetch

**git push --force**

1. **What is the correct syntax to force push changes to the remote repository?**
   * A) git push --force (Answer)
   * B) git pull --force
   * C) git fetch --force
   * D) git merge --force

**git pull --rebase**

1. **What is the correct syntax to pull changes from a remote repository with URL https://github.com/user/repo.git and rebase the current branch?**
   * A) git pull --rebase https://github.com/user/repo.git (Answer)
   * B) git push --rebase https://github.com/user/repo.git
   * C) git fetch --rebase https://github.com/user/repo.git
   * D) git merge --rebase https://github.com/user/repo.git

**git log --graph**

1. **What is the correct syntax to display the commit history as a graph?**
   * A) git log --graph (Answer)
   * B) git log
   * C) git reflog
   * D) git status

**git reflog**

1. **What is the correct syntax to show the history of changes to the tip of branches?**
   * A) git reflog (Answer)
   * B) git log
   * C) git diff
   * D) git status

**git reset --hard**

1. **What is the correct syntax to reset the working directory and index to the state of the last commit, discarding any uncommitted changes?**
   * A) git reset --hard (Answer)
   * B) git clean -f
   * C) git rm <file>
   * D) git stash

I hope this covers all the commands you provided. If you need more questions or further assistance, feel free to ask! 😊

Sure! Here are some medium to hard multiple-choice questions (MCQs) on Git commands and GitHub essentials:

### **Git Commands**

1. **Which command is used to create a new branch in Git?**
   1. a) git branch new-branch
   2. b) git checkout new-branch
   3. c) git create new-branch
   4. d) git init new-branch
2. **How do you stage all changes in your working directory for the next commit?**
   1. a) git add .
   2. b) git stage all
   3. c) git commit -a
   4. d) git push
3. **What does the git rebase command do?**
   1. a) Merges two branches
   2. b) Reapplies commits on top of another base tip
   3. c) Deletes a branch
   4. d) Creates a new repository
4. **Which command is used to view the commit history?**
   1. a) git log
   2. b) git history
   3. c) git show
   4. d) git status
5. **How do you undo the last commit while keeping the changes in the working directory?**
   1. a) git reset --soft HEAD~1
   2. b) git revert HEAD
   3. c) git reset --hard HEAD~1
   4. d) git commit --amend
6. **What is the purpose of the git stash command?**
   1. a) To save changes temporarily and clean the working directory
   2. b) To delete untracked files
   3. c) To merge branches
   4. d) To create a new branch
7. **Which command is used to apply a stashed change?**
   1. a) git stash apply
   2. b) git stash pop
   3. c) git stash merge
   4. d) git stash commit
8. **How do you remove a file from the staging area without deleting it from the working directory?**
   1. a) git reset <file>
   2. b) git rm <file>
   3. c) git clean <file>
   4. d) git delete <file>
9. **What does the git cherry-pick command do?**
   1. a) Applies changes from a specific commit to the current branch
   2. b) Deletes a specific commit
   3. c) Merges two branches
   4. d) Creates a new branch
10. **Which command is used to clone a repository?**
    1. a) git clone <repository-url>
    2. b) git copy <repository-url>
    3. c) git fetch <repository-url>
    4. d) git pull <repository-url>

### **GitHub Essentials**

1. **How do you create a new repository on GitHub?**
   1. a) git create <repository-name>
   2. b) Using the "New repository" button on GitHub
   3. c) git init <repository-name>
   4. d) git new <repository-name>
2. **What is a pull request in GitHub?**
   1. a) A request to fetch changes from a remote repository
   2. b) A request to merge changes from one branch to another
   3. c) A request to delete a branch
   4. d) A request to clone a repository
3. **How do you fork a repository on GitHub?**
   1. a) Using the "Fork" button on the repository page
   2. b) git fork <repository-url>
   3. c) git clone <repository-url>
   4. d) git copy <repository-url>
4. **What is the purpose of GitHub Actions?**
   1. a) To automate workflows
   2. b) To create new repositories
   3. c) To manage issues
   4. d) To merge branches
5. **How do you add a collaborator to a GitHub repository?**
   1. a) Using the "Settings" tab and then "Manage access"
   2. b) git add-collaborator <username>
   3. c) git invite <username>
   4. d) git share <username>
6. **What is the default branch name in a new GitHub repository?**
   1. a) main
   2. b) master
   3. c) default
   4. d) primary
7. **How do you create a new issue on GitHub?**
   1. a) Using the "Issues" tab and then "New issue"
   2. b) git issue create
   3. c) git new issue
   4. d) git report issue
8. **What is the purpose of GitHub Pages?**
   1. a) To host static websites directly from a GitHub repository
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
9. **How do you close an issue on GitHub?**
   1. a) Using the "Close issue" button on the issue page
   2. b) git close issue
   3. c) git resolve issue
   4. d) git delete issue
10. **What is a GitHub Gist?**
    1. a) A way to share code snippets and notes
    2. b) A new branch
    3. c) A pull request
    4. d) A repository

### **More Advanced Questions**

1. **How do you squash multiple commits into one?**
   1. a) git rebase -i
   2. b) git merge --squash
   3. c) git commit --squash
   4. d) git squash <commit>
2. **What does the git bisect command do?**
   1. a) Helps find the commit that introduced a bug
   2. b) Splits a commit into two
   3. c) Merges two branches
   4. d) Deletes a branch
3. **How do you configure a remote repository?**
   1. a) git remote add <name> <url>
   2. b) git remote set-url <name> <url>
   3. c) git remote configure <name> <url>
   4. d) git remote init <name> <url>
4. **What is the purpose of the .gitignore file?**
   1. a) To specify files and directories to be ignored by Git
   2. b) To delete files from the repository
   3. c) To merge branches
   4. d) To create a new branch
5. **How do you rename a branch in Git?**
   1. a) git branch -m <new-name>
   2. b) git rename <new-name>
   3. c) git branch rename <new-name>
   4. d) git branch -r <new-name>
6. **What does the git tag command do?**
   1. a) Creates a tag for a specific commit
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
7. **How do you fetch changes from a remote repository without merging them?**
   1. a) git fetch
   2. b) git pull
   3. c) git merge
   4. d) git clone
8. **What is the purpose of the git diff command?**
   1. a) To show changes between commits, commit and working tree, etc.
   2. b) To merge branches
   3. c) To delete a branch
   4. d) To create a new branch
9. **How do you list all branches in a repository?**
   1. a) git branch
   2. b) git list branches
   3. c) git show branches
   4. d) git branches
10. **What does the git blame command do?**
    1. a) Shows what revision and author last modified each line of a file
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch
11. **How do you revert a specific commit?**
    1. a) git revert <commit>
    2. b) git reset <commit>
    3. c) git undo <commit>
    4. d) git delete <commit>
12. **What is the purpose of the git submodule command?**
    1. a) To manage external repositories within a repository
    2. b) To delete a branch
    3. c) To merge branches
    4. d) To create a new branch
13. **How do you view the changes made to a specific file?**
    1. a) git diff <file>
    2. b) git show <file>
    3. c) git log <file>
    4. d) git status <file>
14. **What does the git reflog command do?**
    1. a) Records updates to the tip of branches
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch
15. **How do you delete a remote branch?**
    1. a) git push origin --delete <branch>
    2. b) git branch -d <branch>
    3. c) git branch -r <branch>
    4. d) git delete <branch>
    5. Sure, let's continue with more questions!

### **Git Commands (continued)**

1. **What is the purpose of the git archive command?**
   1. a) To create an archive of files from a repository
   2. b) To delete a branch
   3. c) To merge branches
   4. d) To create a new branch
2. **How do you view the commit history of a specific file?**
   1. a) git log <file>
   2. b) git history <file>
   3. c) git show <file>
   4. d) git status <file>
3. **What does the git clean command do?**
   1. a) Removes untracked files from the working directory
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
4. **How do you rename a remote repository?**
   1. a) You cannot rename a remote repository using Git commands
   2. b) git remote rename <new-name>
   3. c) git rename <new-name>
   4. d) git remote set-url <new-name>
5. **What is the purpose of the git fsck command?**
   1. a) Verifies the connectivity and validity of objects in the database
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
6. **How do you create a new branch and switch to it immediately?**
   1. a) git checkout -b <branch>
   2. b) git branch <branch> && git checkout <branch>
   3. c) git create <branch>
   4. d) git switch <branch>
7. **What does the git shortlog command do?**
   1. a) Summarizes git log output
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
8. **How do you list all tags in a repository?**
   1. a) git tag
   2. b) git list tags
   3. c) git show tags
   4. d) git tags
9. **What is the purpose of the git describe command?**
   1. a) Gives an abbreviated name for a commit
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
10. **How do you create a lightweight tag?**
    1. a) git tag <tagname>
    2. b) git tag -a <tagname>
    3. c) git tag -m <tagname>
    4. d) git tag -s <tagname>
11. **What does the git show command do?**
    1. a) Displays various types of objects
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch
12. **How do you remove a file from the repository and the working directory?**
    1. a) git rm <file>
    2. b) git delete <file>
    3. c) git remove <file>
    4. d) git clean <file>
13. **What is the purpose of the git gc command?**
    1. a) Optimizes the repository by cleaning up unnecessary files and packing objects
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch
14. **How do you view the changes between two commits?**
    1. a) git diff <commit1> <commit2>
    2. b) git show <commit1> <commit2>
    3. c) git log <commit1> <commit2>
    4. d) git status <commit1> <commit2>
15. **What does the git config command do?**
    1. a) Sets configuration options for Git
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch

### **GitHub Essentials (continued)**

1. **How do you create a new branch on GitHub?**
   1. a) Using the "Branch" dropdown and then "New branch"
   2. b) git branch <branch>
   3. c) git create branch <branch>
   4. d) git new branch <branch>
2. **What is the purpose of GitHub Discussions?**
   1. a) To provide a space for community conversations
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
3. **How do you enable GitHub Pages for a repository?**
   1. a) Using the "Settings" tab and then "Pages"
   2. b) git enable pages
   3. c) git create pages
   4. d) git new pages
4. **What is the purpose of GitHub Sponsors?**
   1. a) To support open-source contributors financially
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
5. **How do you create a new release on GitHub?**
   1. a) Using the "Releases" tab and then "Draft a new release"
   2. b) git release <version>
   3. c) git create release <version>
   4. d) git new release <version>
6. **What is the purpose of GitHub Insights?**
   1. a) To provide analytics and metrics for repositories
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
7. **How do you protect a branch on GitHub?**
   1. a) Using the "Settings" tab and then "Branches"
   2. b) git protect branch <branch>
   3. c) git secure branch <branch>
   4. d) git lock branch <branch>
8. **What is the purpose of GitHub Codespaces?**
   1. a) To provide cloud-based development environments
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
9. **How do you create a new milestone on GitHub?**
   1. a) Using the "Milestones" tab and then "New milestone"
   2. b) git milestone create
   3. c) git new milestone
   4. d) git create milestone
10. **What is the purpose of GitHub Dependabot?**
    1. a) To automatically update dependencies
    2. b) To manage issues
    3. c) To create new branches
    4. d) To automate workflows

### **More Advanced Questions (continued)**

1. **How do you configure Git to use a specific text editor?**
   1. a) git config --global core.editor <editor>
   2. b) git set editor <editor>
   3. c) git editor <editor>
   4. d) git configure editor <editor>
2. **What does the git filter-branch command do?**
   1. a) Rewrites branches based on filters
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
3. **How do you view the status of a specific file?**
   1. a) git status <file>
   2. b) git show <file>
   3. c) git log <file>
   4. d) git diff <file>
4. **What is the purpose of the git ls-tree command?**
   1. a) Lists the contents of a tree object
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
5. **How do you create an annotated tag?**
   1. a) git tag -a <tagname>
   2. b) git tag <tagname>
   3. c) git tag -m <tagname>
   4. d) git tag -s <tagname>
6. **What does the git rev-parse command do?**
   1. a) Parses revision (commit) identifiers
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
7. **How do you view the commit message of a specific commit?**
   1. a) git show <commit>
   2. b) git log <commit>
   3. c) git diff <commit>
   4. d) git status <commit>
8. **What is the purpose of the git whatchanged command?**
   1. a) Shows logs with differences introduced in each commit
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
9. **How do you view the tree structure of a specific commit?**
   1. a) git ls-tree <commit>
   2. b) git show <commit>
   3. c) git log <commit>
   4. d) git status <commit>
10. **What does the git symbolic-ref command do?**
    1. a) Reads and modifies symbolic references
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch

Sure, let's continue with more questions!

### **Git Commands (continued)**

1. **How do you view the contents of a specific commit?**
   1. a) git show <commit>
   2. b) git log <commit>
   3. c) git diff <commit>
   4. d) git status <commit>
2. **What does the git rev-list command do?**
   1. a) Lists commit objects in reverse chronological order
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
3. **How do you view the changes introduced by a specific commit?**
   1. a) git show <commit>
   2. b) git log <commit>
   3. c) git diff <commit>
   4. d) git status <commit>
4. **What is the purpose of the git format-patch command?**
   1. a) Prepares patches for email submission
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
5. **How do you view the list of files changed in a specific commit?**
   1. a) git show --name-only <commit>
   2. b) git log --name-only <commit>
   3. c) git diff --name-only <commit>
   4. d) git status --name-only <commit>
6. **What does the git apply command do?**
   1. a) Applies a patch to files and/or the index
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
7. **How do you view the commit message of the most recent commit?**
   1. a) git log -1
   2. b) git show -1
   3. c) git diff -1
   4. d) git status -1
8. **What is the purpose of the git notes command?**
   1. a) Adds or removes notes to/from objects
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
9. **How do you view the list of branches that have been merged into the current branch?**
   1. a) git branch --merged
   2. b) git branch --list
   3. c) git branch --all
   4. d) git branch --merged-only
10. **What does the git verify-commit command do?**
    1. a) Checks the GPG signature of commits
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch

I hope these questions help you test and improve your knowledge of Git commands and GitHub essentials! If you need more questions or have any other requests, feel free to ask.

Absolutely! Here are some of the most challenging questions on Git commands and GitHub essentials:

### **Advanced Git Commands**

1. **What does the git rev-parse --abbrev-ref HEAD command do?**
   1. a) Displays the current branch name
   2. b) Displays the commit hash of the HEAD
   3. c) Displays the abbreviated commit hash
   4. d) Displays the full commit message
2. **How do you perform an interactive rebase to edit a commit message that is not the most recent one?**
   1. a) git rebase -i HEAD~n
   2. b) git commit --amend
   3. c) git rebase --edit
   4. d) git rebase -m HEAD~n
3. **What is the purpose of the git reflog expire command?**
   1. a) Prunes older reflog entries
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
4. **How do you create a new orphan branch?**
   1. a) git checkout --orphan <branch>
   2. b) git branch --orphan <branch>
   3. c) git create --orphan <branch>
   4. d) git new --orphan <branch>
5. **What does the git update-index command do?**
   1. a) Updates the index with the current content found in the working tree
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
6. **How do you split a commit into two separate commits?**
   1. a) git rebase -i and then use edit and reset
   2. b) git split <commit>
   3. c) git commit --split
   4. d) git rebase --split
7. **What is the purpose of the git fsck --full command?**
   1. a) Verifies the connectivity and validity of objects in the database, including unreachable objects
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
8. **How do you create a signed tag?**
   1. a) git tag -s <tagname>
   2. b) git tag -a <tagname>
   3. c) git tag -m <tagname>
   4. d) git tag <tagname>
9. **What does the git bundle command do?**
   1. a) Creates a single file containing a pack of objects and references
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
10. **How do you remove a file from the repository's history?**
    1. a) git filter-branch --tree-filter 'rm -f <file>' HEAD
    2. b) git rm <file>
    3. c) git reset <file>
    4. d) git delete <file>

### **Advanced GitHub Essentials**

1. **What is the purpose of GitHub's CODEOWNERS file?**
   1. a) To define individuals or teams responsible for code in a repository
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
2. **How do you set up branch protection rules on GitHub?**
   1. a) Using the "Settings" tab, then "Branches", and configuring protection rules
   2. b) git protect branch <branch>
   3. c) git secure branch <branch>
   4. d) git lock branch <branch>
3. **What is the purpose of GitHub's dependabot.yml file?**
   1. a) To configure Dependabot for automated dependency updates
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
4. **How do you create a GitHub Actions workflow?**
   1. a) By creating a .github/workflows/<workflow>.yml file in the repository
   2. b) git create workflow <workflow>
   3. c) git new workflow <workflow>
   4. d) git workflow <workflow>
5. **What is the purpose of GitHub's SECURITY.md file?**
   1. a) To provide security policies and procedures for the repository
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
6. **How do you enable GitHub Discussions for a repository?**
   1. a) Using the "Settings" tab, then "Options", and enabling Discussions
   2. b) git enable discussions
   3. c) git create discussions
   4. d) git new discussions
7. **What is the purpose of GitHub's FUNDING.yml file?**
   1. a) To provide information on how to financially support the project
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
8. **How do you configure GitHub Pages to use a custom domain?**
   1. a) Using the "Settings" tab, then "Pages", and configuring the custom domain
   2. b) git configure pages <domain>
   3. c) git set pages <domain>
   4. d) git custom pages <domain>
9. **What is the purpose of GitHub's CODE\_OF\_CONDUCT.md file?**
   1. a) To define community standards and guidelines for contributors
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
10. **How do you create a GitHub Pages site using Jekyll?**
    1. a) By creating a \_config.yml file and necessary Jekyll files in the repository
    2. b) git create jekyll <site>
    3. c) git new jekyll <site>
    4. d) git jekyll <site>

These questions should provide a challenging test of your knowledge on Git commands and GitHub essentials. If you need more questions or have any other requests, feel free to ask!

Got it! Let's add more challenging questions to the list.

### **Advanced Git Commands (continued)**

1. **How do you create a patch file from the last commit?**
   1. a) git format-patch -1
   2. b) git diff > patchfile
   3. c) git patch -1
   4. d) git create-patch -1
2. **What does the git worktree command do?**
   1. a) Manages multiple working trees attached to the same repository
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
3. **How do you configure Git to cache your credentials for a specific period?**
   1. a) git config --global credential.helper 'cache --timeout=<seconds>'
   2. b) git set credentials --cache <seconds>
   3. c) git cache credentials <seconds>
   4. d) git credentials --timeout <seconds>
4. **What is the purpose of the git daemon command?**
   1. a) Starts a simple Git server
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
5. **How do you list all the objects in the Git database?**
   1. a) git fsck --full
   2. b) git show-ref
   3. c) git ls-tree -r HEAD
   4. d) git cat-file --batch-check
6. **What does the git rerere command do?**
   1. a) Reuse recorded resolution of conflicted merges
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
7. **How do you configure Git to use a specific merge tool?**
   1. a) git config --global merge.tool <tool>
   2. b) git set merge-tool <tool>
   3. c) git merge-tool <tool>
   4. d) git configure merge <tool>
8. **What is the purpose of the git instaweb command?**
   1. a) Instantly browse your working repository in a web browser
   2. b) Deletes a branch
   3. c) Merges two branches
   4. d) Creates a new branch
9. **How do you create a shallow clone of a repository?**
   1. a) git clone --depth 1 <repository-url>
   2. b) git shallow-clone <repository-url>
   3. c) git clone --shallow <repository-url>
   4. d) git clone --single-branch <repository-url>
10. **What does the git send-email command do?**
    1. a) Sends a collection of patches as emails
    2. b) Deletes a branch
    3. c) Merges two branches
    4. d) Creates a new branch

### **Advanced GitHub Essentials (continued)**

1. **How do you configure GitHub Actions to run on a specific schedule?**
   1. a) By using the schedule event in the workflow file
   2. b) git schedule actions <time>
   3. c) git actions schedule <time>
   4. d) git create schedule <time>
2. **What is the purpose of GitHub's CONTRIBUTING.md file?**
   1. a) To provide guidelines for contributing to the repository
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
3. **How do you set up a GitHub webhook?**
   1. a) Using the "Settings" tab, then "Webhooks", and configuring the webhook
   2. b) git create webhook <url>
   3. c) git set webhook <url>
   4. d) git webhook <url>
4. **What is the purpose of GitHub's ISSUE\_TEMPLATE.md file?**
   1. a) To provide a template for creating new issues
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
5. **How do you configure GitHub Actions to run on pull requests?**
   1. a) By using the pull\_request event in the workflow file
   2. b) git actions pull-request
   3. c) git create actions pull-request
   4. d) git set actions pull-request
6. **What is the purpose of GitHub's PULL\_REQUEST\_TEMPLATE.md file?**
   1. a) To provide a template for creating new pull requests
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
7. **How do you enable GitHub Pages to use a specific branch?**
   1. a) Using the "Settings" tab, then "Pages", and selecting the branch
   2. b) git set pages <branch>
   3. c) git create pages <branch>
   4. d) git pages <branch>
8. **What is the purpose of GitHub's dependabot.yml file?**
   1. a) To configure Dependabot for automated dependency updates
   2. b) To manage issues
   3. c) To create new branches
   4. d) To automate workflows
9. **How do you create a GitHub Actions workflow to run on multiple operating systems?**
   1. a) By specifying multiple runs-on values in the workflow file
   2. b) git actions os <os>
   3. c) git create actions os <os>
   4. d) git set actions os <os>
10. **What is the purpose of GitHub's FUNDING.yml file?**
    1. a) To provide information on how to financially support the project
    2. b) To manage issues
    3. c) To create new branches
    4. d) To automate workflows

I hope these additional questions provide the level of difficulty you're looking for! If you need even more questions or have any other requests, feel free to ask.