Git Assignment

1. How do you initialize a new Git repository named "project1" on your local machine?  
     
    Answer: First we go to the desired directory then we need to type in **git init** project1.
2. How do you add a new file named "index.html" to the "project1" repository?  
    Answer: 1. touch index.html 2. git add index.html 3. git commit -m "Add index.html file"
3. How do you stage the changes made to "index.html" for committing?  
    Answer: git add index.html
4. How do you commit the changes made to "index.html" with a commit message of "Add index.html"?  
    Answer: git commit -m "Add index.html"
5. How do you view the commit history of the "project1" repository?  
    Answer: git log
6. How do you create a new branch named "feature-branch" in the "project1" repository?  
   Answer: 1. git branch feature-branch
7. How do you switch to the "feature-branch" in the "project1" repository?  
    Answer: git checkout feature-branch
8. How do you make changes to "index.html" in the "feature-branch"?  
    Answer: 1. git checkout feature-branch  
    2. git add index.html  
    3. git commit -m "Update index.html "
9. How do you stage and commit the changes made in the "feature-branch" with a commit message of "Update index.html in feature branch"?  
   Answer: 1. git checkout feature-branch  
    2. git add index.html  
    3. git commit -m "Update index.html in feature branch "
10. How do you switch back to the main branch in the "project1" repository?  
     Answer: git checkout main
11. How do you merge the changes from the "feature-branch" into the main branch?  
     Answer: 1. get checkout main  
     2. git merge feature-branch  
     3. git push origin main
12. How do you resolve any merge conflicts that occur during the merge process?  
    Answer: Identify Conflicting Files: Git will notify you of any conflicts during the merge process.   
    Resolve Conflicts: Use a text editor to review each conflicting section and decide how to resolve the differences.  
    Remove Conflict Markers: After resolving the conflicts, delete the conflict markers   
    Save Changes: Save the modified files once you've resolved all conflicts.  
    Add Resolved Files: After resolving conflicts, stage the resolved files using git add.
13. How do you view the changes introduced by the merge commit?  
     Answer git log
14. How do you create a new tag named "v1.0" for the current commit in the "project1" repository?  
    Answer: 1. git tag v1.0  
     2. git push origin v1.0
15. How do you push the "project1" repository to a remote repository named "origin"? Answer: git push origin main
16. How do you clone the "project1" repository from a remote repository to another machine?   
     Answer: git clone <https://github.com/username/project1.git> another\_machine
17. How do you fetch the latest changes from the remote repository to your local "project1" repository?   
     Answer: get fetch origin
18. How do you pull the latest changes from the remote repository into your current branch in the "project1" repository?  
     Answer: git pull origin current-branch
19. How do you create a new branch named "bug-fix" in the "project1" repository based on a specific commit?   
    Answer: git branch bug-fix project1
20. How do you revert the last commit made in the "project1" repository?

Answer: git REVERT head