Creating a New Branch:

- `git branch [branch-name]`
    - Example: `git branch feature-branch`
    - Description: Creates a new branch named `feature-branch`.

Switching to a Branch:

- `git checkout [branch-name]`
    - Example: `git checkout feature-branch`
    - Description: Switches to the specified branch.

Creating and Switching to a New Branch:

- `git checkout -b [branch-name]`
    - Example: `git checkout -b feature-branch`
    - Description: Creates and switches to a new branch named `feature-branch`.

Listing Branches:

- `git branch`
    - Example: `git branch`
    - Description: Lists all local branches, highlighting the current branch.
    - Output:

    ```markdown
    master
    * feature-branch
    ```

Deleting a Branch:

- `git branch -d [branch-name]`
    - Example: `git branch -d feature-branch`
    - Description: Deletes the specified branch if it has been merged.
- `git branch -D [branch-name]`
    - Example: `git branch -D feature-branch`
    - Description: Forcefully deletes the specified branch, even if it hasn't been merged.

Merging Branches:

- `git merge [branch-name]`
    - Example: `git merge feature-branch`
    - Description: Merges the specified branch into the current branch.

Resolving Merge Conflicts:

- Conflicts occur when the same lines of code are changed in different branches.
- Edit the conflicted files to resolve the conflicts.
- Mark conflicts as resolved: `git add [file]`
- Commit the merge: `git commit`

Viewing Branch History:

- `git log --oneline --graph --decorate --all`
  - Example: `git log --oneline --graph --decorate --all`
  - Description: Displays a graphical representation of the commit history for all branches.

Pushing Branches to Remote:

- `git push origin [branch-name]`
  - Example: `git push origin feature-branch`
  - Description: Pushes the specified branch to the remote repository.

Tracking Remote Branches:

- `git checkout -b [branch-name] origin/[branch-name]`
  - Example: `git checkout -b feature-branch origin/feature-branch`
  - Description: Creates a local branch tracking a remote branch.

Deleting Remote Branches:

- `git push origin --delete [branch-name]`
  - Example: `git push origin --delete feature-branch`
  - Description: Deletes the specified branch from the remote repository.