

## Git Contd

- Git treats changes only when they are made in files. Empty folders are not considered as changes in git
- While adding changes from working tree to staging area
  - all the changes in complete repo `git add -A`
  - add specific change `git add <path>`
  - add all changes w.r.t to current directory `git add .`
  - add only modified changes `git add -u`

## Branches

- Branches in version control systems allow parallel development.
- By default git will have a branch called as master.
- Branch always points to latest commit
- Changes from one branch can be merged to other branch
  - fast-forward
  - three way merge
- [Refer Here](#) for branches
- [Refer Here](#) for git merge

## Activity

- Create a new folder (learninggit)
- navigate to the folder in git bash
- Execute `git init`
- now create a file called as `main.tf`
- execute git status
- now move the changes to staging area
- now add one more file called as `variables.tf`
- add to staging area and then create a commit
- execute git status
- now add `outputs.tf` and create a new commit
- Represent this in a graph
- rename the branch to `main`
- create a new branch `v1.0`
- create a new branch `v2.0`
- checkout to v1.0 and add files network.tf as `commit-1`
- and one more commit by adding some text in any of the files `commit-2`
- now checkout to v2.0 and make changes in some files to create commit-3
- Now merge changes from v2.0 to main branch `fast-forward`
- now merge changes from v1.0 to main branch `three-way-merge`