Git Learning:

In Git we can create Feature branches and after development is done we can merge all feature branch code to master branch

We have branch protection policy where we can create protection rules and add approvals for merging code to master branch

Merging strategy and Branching Strategy:

Each ticket will be created as an one feature branch and after development we will raise PR from feature to Master for code merge

Git is an content tracker

We can add a collaborator in git so that the collaborator can review and approve PR

We can add branch restriction policy and if developer needs to merge changes from feature branch to master

Merge:

echo “hello world” | git hash-object –stdin

233kh31h2313jhj2khk23nk3nkn3jhjb23jbb –(commit id) SHA code with 40 characters universal unique ID for the content

Git log will get commit id for complete content in the particular folder

If content is changed commit id will be changed

Git log - –oneline : it will print commit in one line

Git cat-file 6agdhd –p (it will show the commit history)

Merge will preserver the history, it is like a chain structure it will have two parents

Rebase:

Git branch –m rebase

Rebase is also a another merge strategy

No extra commits will have in rebase when we do pr and merge

Commit ids will be changed when do pR and merge in rebase

Rebase will not preserve th history it will rewrites the history

Squash:

We can squash many number of commits to single commit

Developer will do more development changes and merge code so more commits will be there it is better to squash to single commit using squash

Fast forward merge:

Branching strategy:

Apart from master or main rest everything is feature branch

Master main is long live branch and feature branches are short lived branches

Every company and project will have different branching strategy based on their requirements and environments

Merge conflict:

If different code in same line, so git cannot understand so it is conflict

Developers should talk and resolve the issue