### **merge**

Incorporates changes from named commit into current branch.

Changes from the point the branch on which named commit lives up until the commit are included.

Creates merge commits

How different from rebase?

Rebase creates a linear history

Rebase doesn’t provide context for when changes from one branch were merged into another.

Rebase looks cleaner.

Merge is non-destructive

Merging leaves the branches intact

Rebasing creates new commits, applying them to the tip of master

Rebasing lets you indicate how you’d like the new commits to be generated

combine multiple commits into one, etc.

find all merge conflicts

grep -lr '<<<<<<<' .

What is a merge commit?

A commit in which changes from one branch are merged into another branch.

Can pollute the target branch if done too much.

A merge commit contains more than one parent

Can the merge commit be assigned a commit comment?

yes, just add -m

git merge {src-branch} {tgt-branch}

same as:

git checkout {tgt-branch}

git merge {src-branch}

Does merge always create a merge commit?

No. If no changes have been made on the target branch since the diverting branch was created, merge will simply perform

How can you prevent fast-forward commits?

Given that ff commits are the default behavior if it is possible, just add the --no-ff commit

How does merge work?

Given two branches A and B, with B having branched from A several commits ago, and both branches containing commits since the branch point, merging B into A entails applying each commit on B since the branch point to the tail of A.

What if there is a merge conflict during a merge attempt?

Either resolve it or abort the merge.

How do you abort a merge in process?

If a merge results in conflicts, you can attempt to abort it using git merge --abort.

What problems can occur trying to abort a merge?

If there was complicated unstaged workspace changeswhen the merge attempt occurred, it may be impossibile to abort a merge attampt.

When should a merge not be performed?

When there are complex uncommitted changes in your staging area

How can you perform a merge without actually committing it?

add --no-commit

Will adding --no-commit prevent a fast-forward merge?

No

What is a mechanical merge?

TODO

How can you avoid automatically accepting an auto-merge comment?

Add -e(dit) to invoke an editor before committing the commit

What are some merge best practices?

Always cleanup your staging area before performing a merge