## Git branching basics quick reference

In all of these examples, substitute *personal-branch* with the name of your branch.

If you find yourself in a merge conflict, see the Git merge conflict basics quick reference.

## Part 1: Create your personal branch

- Note: You only need to do these Part 1 steps once.
- (1) Create your new branch locally.

```
git checkout -b personal-branch
```

(2) Push the local copy of your personal branch to a remote origin.

```
git push origin personal-branch
```

[Verify] Go to your repository on GitLab and click on the branches field. You should see your new branch listed.

## Part 2: Add your branch changes to the main branch

• Note: Do these Part 2 steps every time you have changes that you want to put in main.

**Important:** Tell your team when you're about to merge something into main! Good communication helps prevent merge conflicts.

- (3) On your personal branch, stage and commit your changes.
  - Note: You can replace -A with the name of a specific file (or a whitespace-separated list of files) if you want to add and commit specific file(s) rather than everything at once. This can be especially helpful when correcting merge conflicts.

```
git add -A
git commit -m "My commit message"
```

(4) While on your personal branch, push your changes to your remote branch for safekeeping.



git push origin personal-branch

[Verify] Go to your repository on GitLab and switch to your personal branch. You should see your latest commit(s).

(5) Check out (switch to) your local copy of the main branch.

git checkout main

(6) While on your local copy of the main branch, pull any changes from the remote main branch (origin) into your local copy of main.

git pull origin main

(7) While on your local copy of the main branch, merge the changes from your personal branch into it.

git merge personal-branch

(8) While on your local copy of the main branch, push your merged changes to the remote main (origin).

git push origin main

[Verify] Go to your repository on GitLab and switch to your main branch. You should see the latest commit(s) from your personal branch.

