



# **Comparing commits**

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You can compare the state of your repository across branches, tags, commits, forks, and dates.

To compare different versions of your repository, append /compare to your repository's path.

We'll demonstrate the power of Compare by looking at the compare page for <u>a fork of</u> the Linguist repo, which is at

 $\underline{https://github.com/octocat/linguist/compare/master...octocat:master.}$ 

Every repository's Compare view contains two drop down menus: base and compare.

base should be considered the starting point of your comparison, and compare is the endpoint. During a comparison, you can always change your base and compare points by clicking on **Edit**.

## Comparing branches &

The most common use of Compare is to compare branches, such as when you're starting a new pull request. You'll always be taken to the branch comparison view when starting a new pull request.

To compare branches, you can select a branch name from the compare drop down menu at the top of the page.

Here's an example of a comparison between two branches.

# **Comparing tags** *₽*

Comparing release tags will show you changes to your repository since the last release. For more information, see "Comparing releases."

To compare tags, you can select a tag name from the compare drop-down menu at the top of the page.

Here's an example of a comparison between two tags.

**Note:** If a branch and a tag have the same name, the branch will be used when comparing commits. You can compare the tag specifically by adding tags/ to the tag name.

### Comparing commits &

You can also compare two arbitrary commits in your repository or its forks on GitHub in a two-dot diff comparison.

To quickly compare two commits or Git Object IDs (OIDs) directly with each other in a two-dot diff comparison on GitHub, edit the URL of your repository's "Comparing changes" page.

For example, this URL uses the shortened seven-character SHA codes to compare commits f75c570 and 3391dcc: https://github.com/github-linguist/linguist/compare/f75c570..3391dcc.

To learn more about other comparison options, see "About comparing branches in pull requests."

### Comparing across forks @

You can compare your base repository and any forked repository. This is the view that's presented when a user performs a Pull Request to a project.

To compare branches on different repositories, preface the branch names with user names. For example, by specifying octocat:main for base and octo-org:main for compare, you can compare the main branch of the repositories respectively owned by octocat and octo-org.

Here's an example of a comparison between two repositories.

#### Comparisons across commits &

You can compare a single commit in Git to the commit's predecessors using two types of notation.

Notation	Meaning	Example	Comparison
	One commit prior.  Repeat the ^ character to indicate one more commit further back in the history.	96d29b7^^^^ Represents the commit five commits prior to 96d29b7.	View comparison
~N	N commit(s) prior.	96d29b7–5  Represents the commit five commits prior to 96d29b7.	View comparison

# Further reading @

• "Changing the base branch of a pull request"

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