**Comparing commits**

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 [a fork of the Linguist repo](https://github.com/octocat/linguist), which is at <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](https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/proposing-changes-to-your-work-with-pull-requests/creating-a-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](https://github.com/octocat/linguist/compare/master...octocat:an-example-comparison-for-docs).

**Comparing tags**

Comparing release tags will show you changes to your repository since the last release. For more information, see "[Comparing releases](https://docs.github.com/en/repositories/releasing-projects-on-github/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](https://github.com/octocat/linguist/compare/v2.2.0...octocat:v2.3.3).

**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 c3a414e and faf7c6f: https://github.com/github/linguist/compare/c3a414e..faf7c6f.

To learn more about other comparison options, see "[About comparing branches in pull requests](https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/proposing-changes-to-your-work-with-pull-requests/about-comparing-branches-in-pull-requests#three-dot-and-two-dot-git-diff-comparisons)."

**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](https://github.com/github/linguist/compare/master...octocat:master).

**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](https://github.com/octocat/linguist/compare/octocat:96d29b7%5E%5E%5E%5E%5E...octocat:96d29b7) |
| ~N | N commit(s) prior. | 96d29b7~5  Represents the commit five commits prior to 96d29b7. | [View comparison](https://github.com/octocat/linguist/compare/octocat:96d29b7~5...octocat:96d29b7) |

**Further reading**

* "[Changing the base branch of a pull request](https://docs.github.com/en/pull-requests/collaborating-with-pull-requests/proposing-changes-to-your-work-with-pull-requests/changing-the-base-branch-of-a-pull-request)"