# CONTRIBUTING

Please note that this project is released with a [Contributor Code of

Conduct](code\_of\_conduct.md). By participating in this project you agree to

abide by its terms.

## Bug Reports

\* Try to reproduce the issue against the latest revision. There might be

unrealeased work that fixes your problem!

\* Ensure that your issue has not already been reported.

\* Include the steps you carried out to produce the problem. If we can't

reproduce it, we can't fix it.

\* Include the behavior you observed along with the behavior you expected,

and why you expected it.

## Development dependencies

\* `Byebug` depends on Ruby's TracePoint API provided by `ruby-core`. This is a

young API and a lot of bugs have been recently corrected, so make sure you

always have the lastest patch level release installed.

\* The recommended tool to manage development dependencies is `bundler`. Run

`gem install bundler` to install it.

\* Running `bundle install` inside a local clone of `byebug` will get development

dependencies installed.

## Running the test suite

\* Make sure you compile the C-extension using `bin/rake compile`.

Otherwise you won't be able to use `byebug`.

\* Run the test suite using the default rake task (`bin/rake`). This task is

composed of 3 subtasks: `bin/rake compile`, `bin/rake test` & `bin/rake lint`.

\* If you want to run specific tests, use the provided test runner, like so:

\* Specific test files. For example, `bin/minitest test/commands/break\_test.rb`

\* Specific test classes. For example, `bin/minitest BreakAtLinesTest`

\* Specific tests. For example,

`bin/minitest test\_catch\_removes\_specific\_catchpoint`

\* Specific fully qualified tests. For example,

`bin/minitest BreakAtLinesTest#test\_setting\_breakpoint\_sets\_correct\_fields`

\* You can combine any of them and you will get the union of all filters. For

example: `bin/minitest BreakAtLinesTest

test\_catch\_removes\_specific\_catchpoint`

## Code style

\* Byebug uses several style checks to check code style consistent. You can run

those using `bin/rake lint`.

## Byebug as a C-extension

Byebug is a gem developed as a C-extension. The debugger internal's

functionality is implemented in C (the interaction with the TracePoint API).

The rest of the gem is implemented in Ruby. Normally you won't need to touch

the C-extension, but it will obviously depended on the bug you're trying to fix

or the feature you are willing to add. You can learn more about C-extensions

[here](https://tenderlovemaking.com/2009/12/18/writing-ruby-c-extensions-part-1.html)

or

[here](https://tenderlovemaking.com/2010/12/11/writing-ruby-c-extensions-part-2.html).