Understanding how developers use the debugger

Presentation for SCG seminar

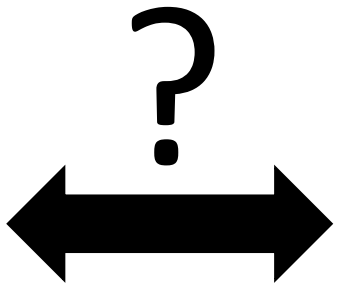
Roger Stebler

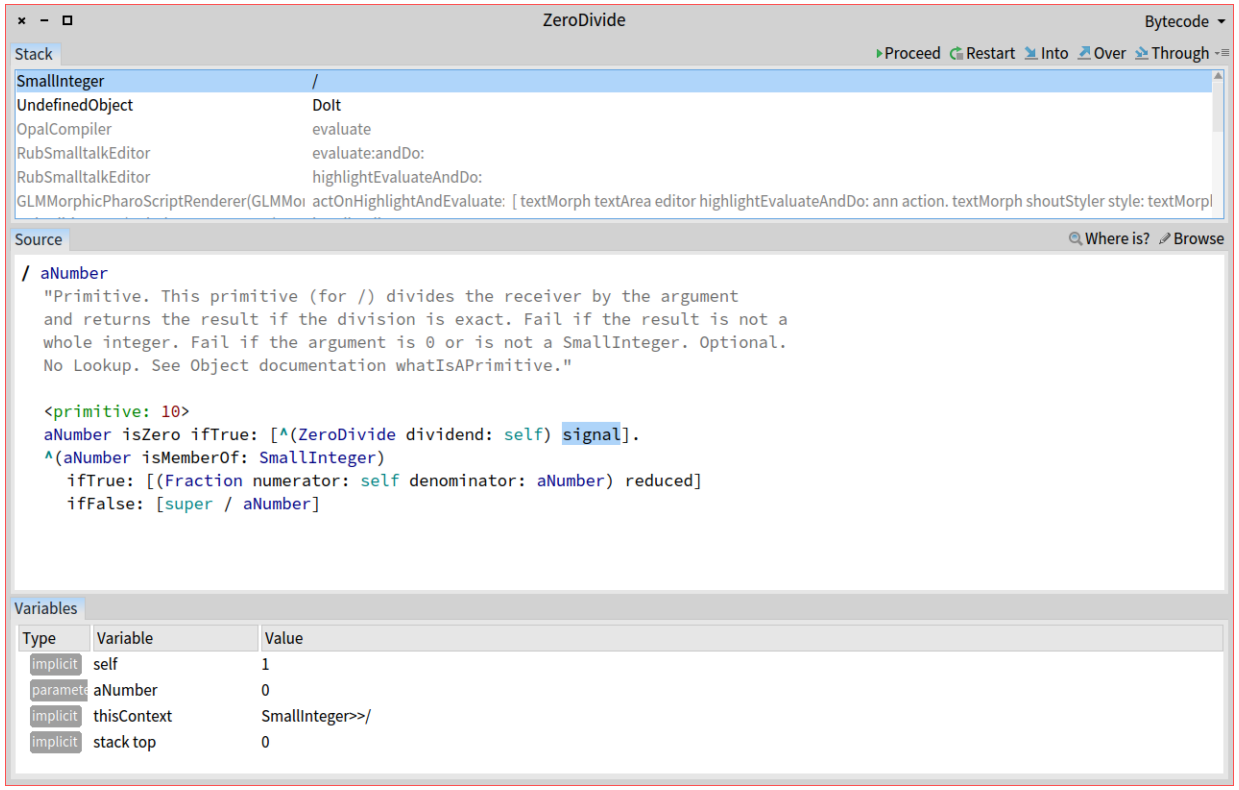
Supervisor: Andrei Chiș

Applications are complex;
debugging is difficult

One tool used for debugging is the
debugger

How to improve the debugger?





Understand how do developers use the debugger?

Demo

Debugger

Announcements

Event Recorder

HTTP request

Server

Debugger

Announcements

Event Recorder

Announcements

HTTP request

Server

HTTP request

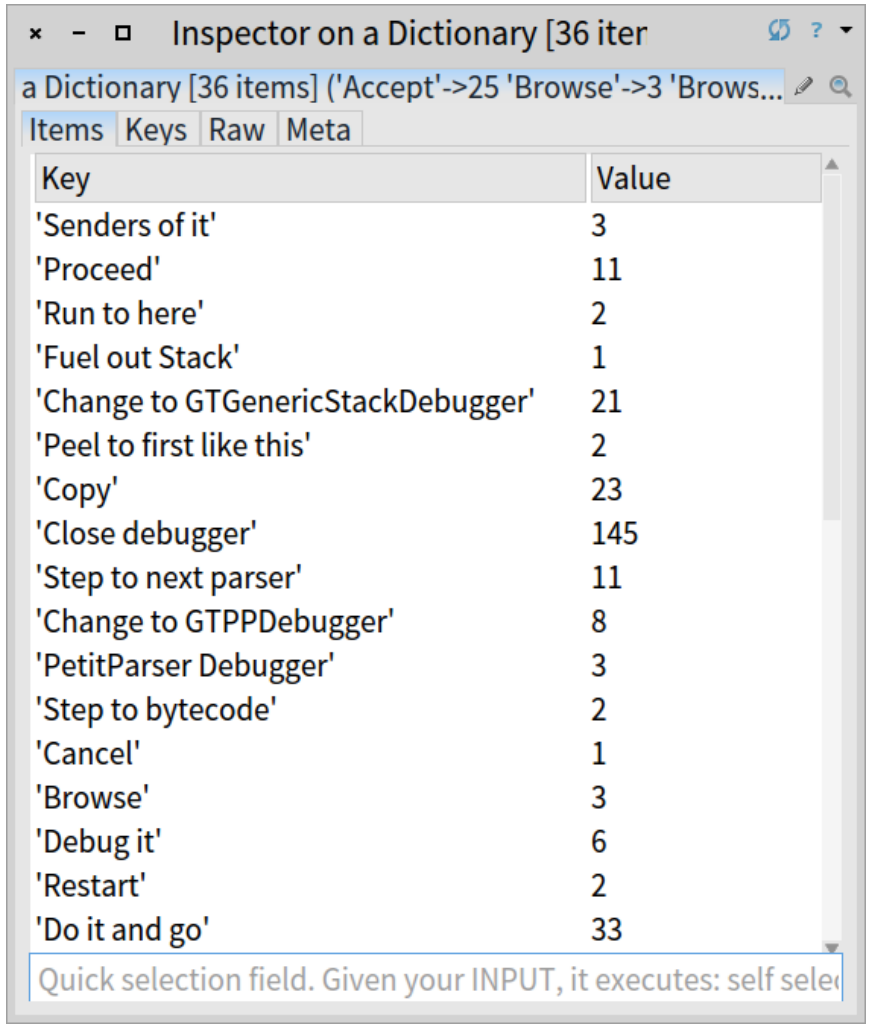
Zip

Debugger
Analyzer

Summarization

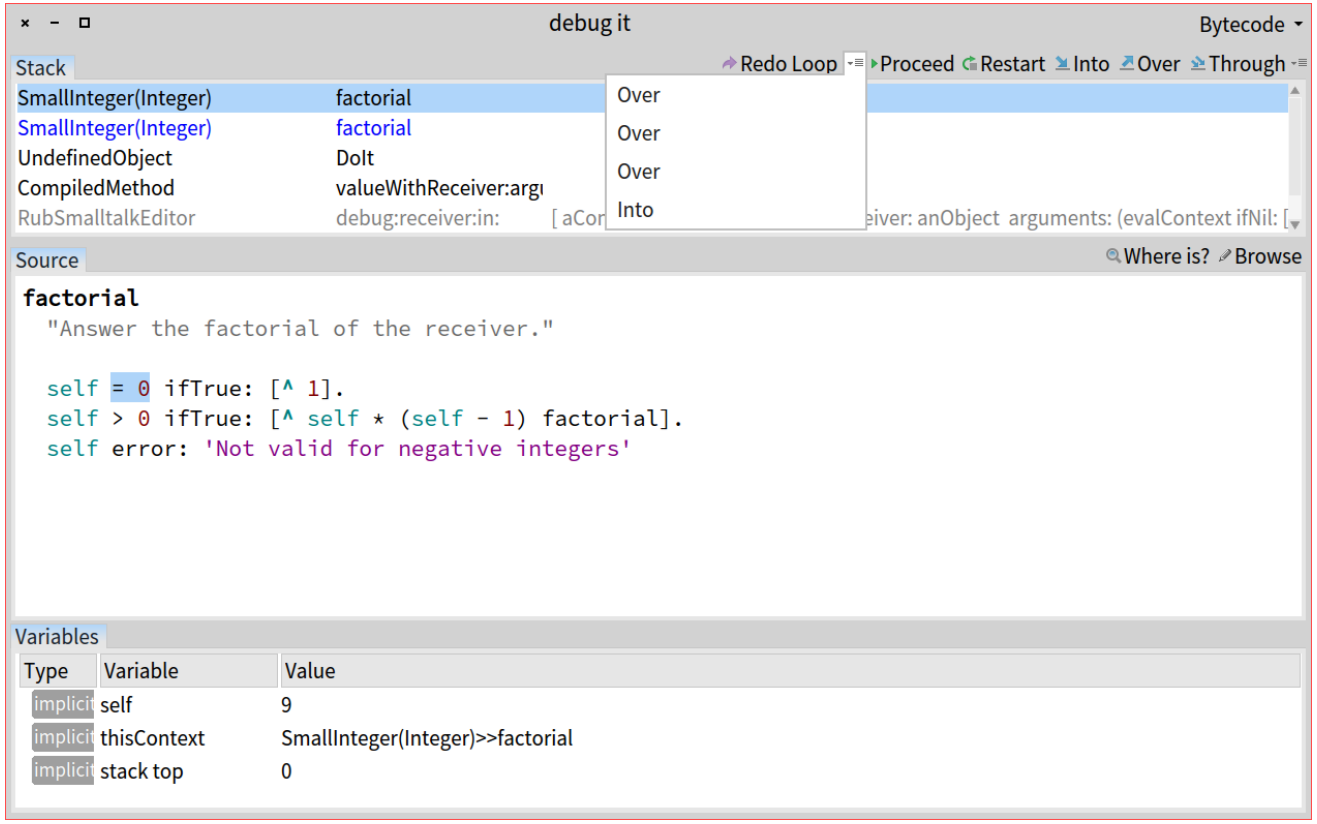
Statistical analysis

In what context is a debugging action used the most?



Give recommendations what to do next

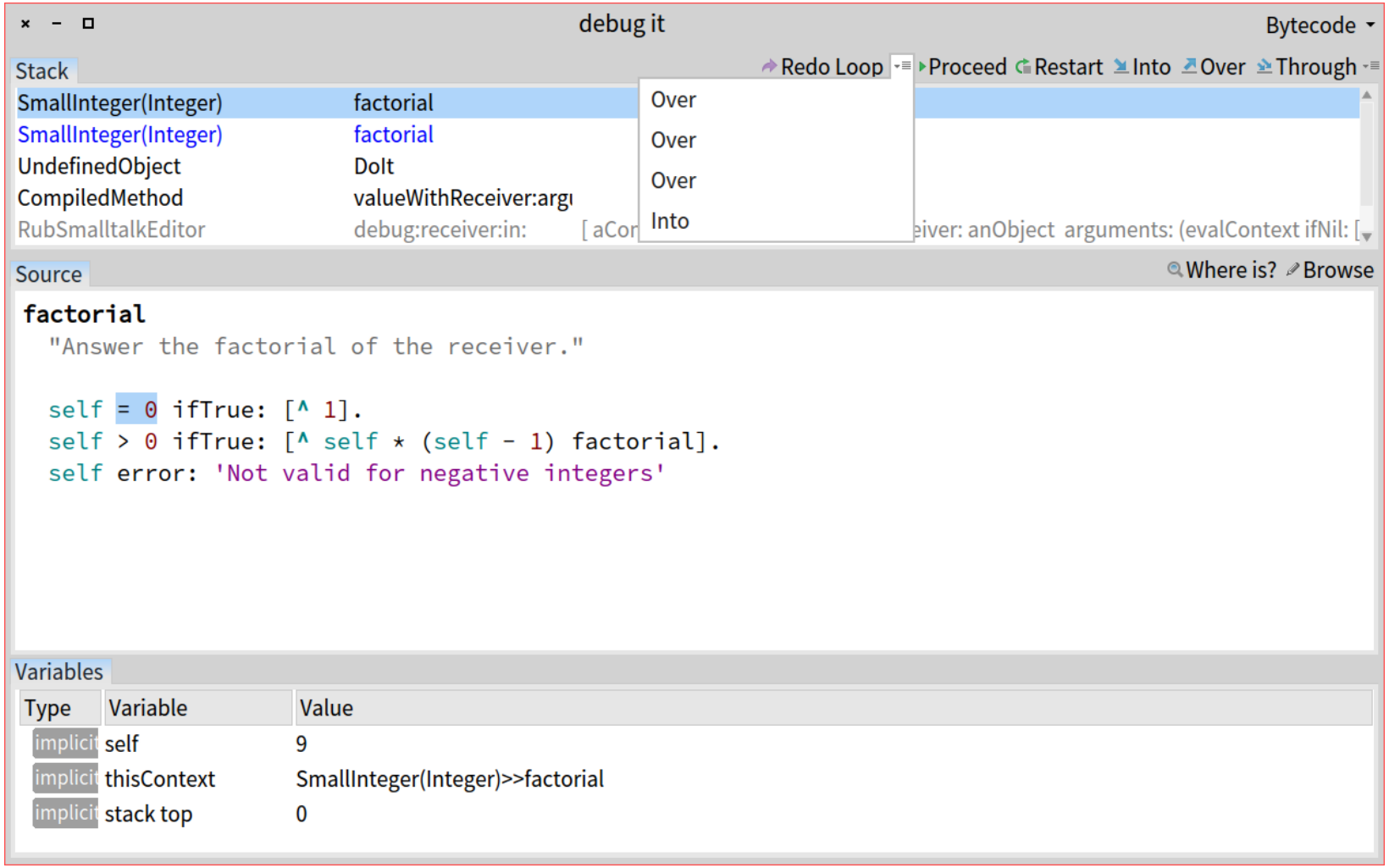
Are there some debugging patterns?



Automatization

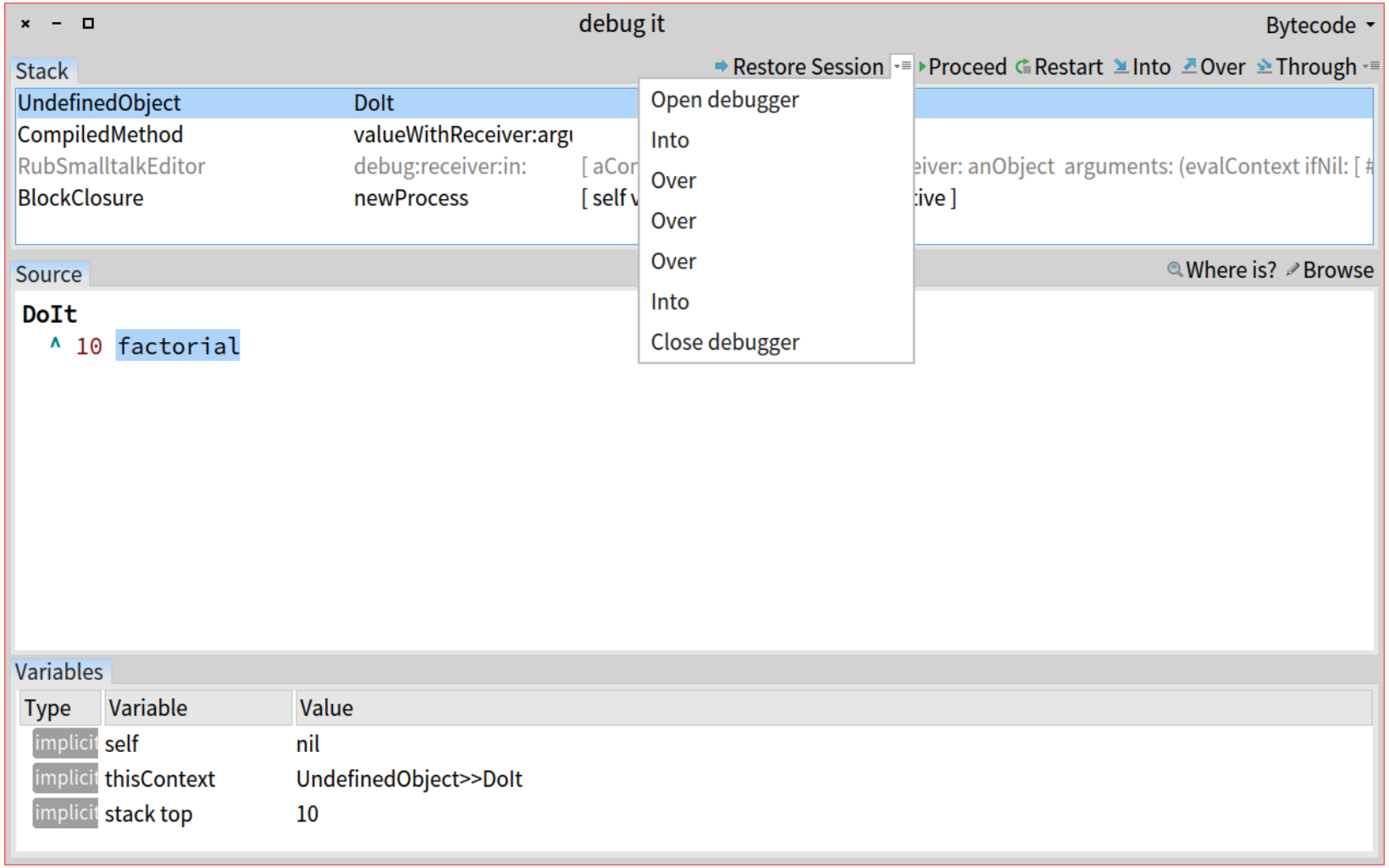
Redo Loop

Same position in the code earlier in the current session



Restore Session

Same context in a previous session

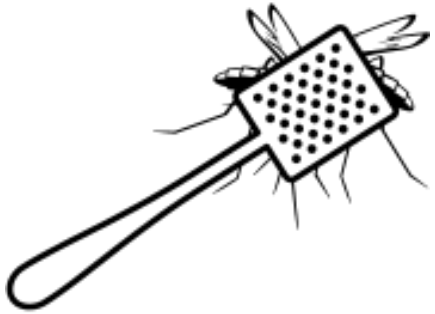




Find a categorization?

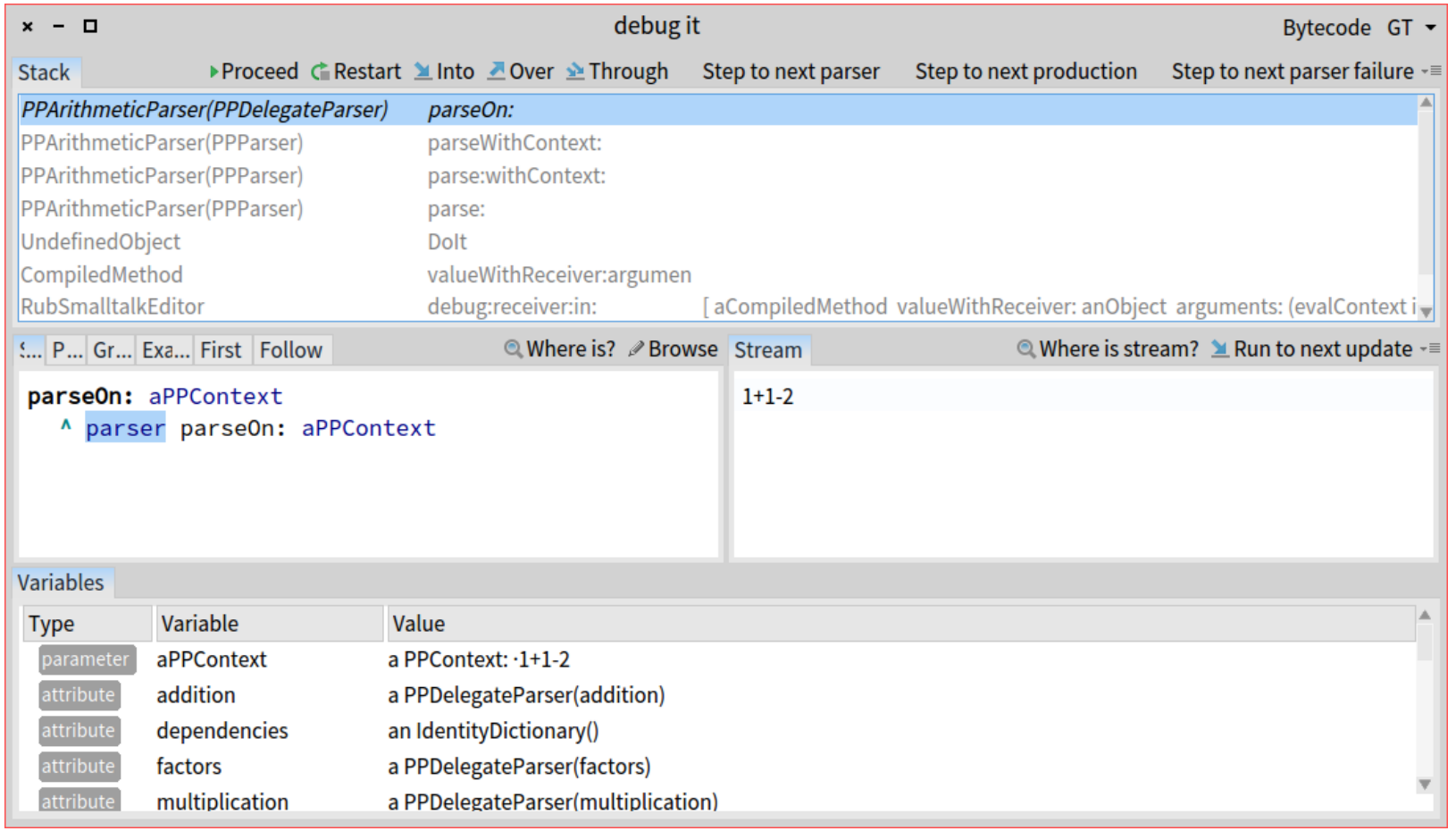
Debugging Actions

Are different types of bugs handled differently?



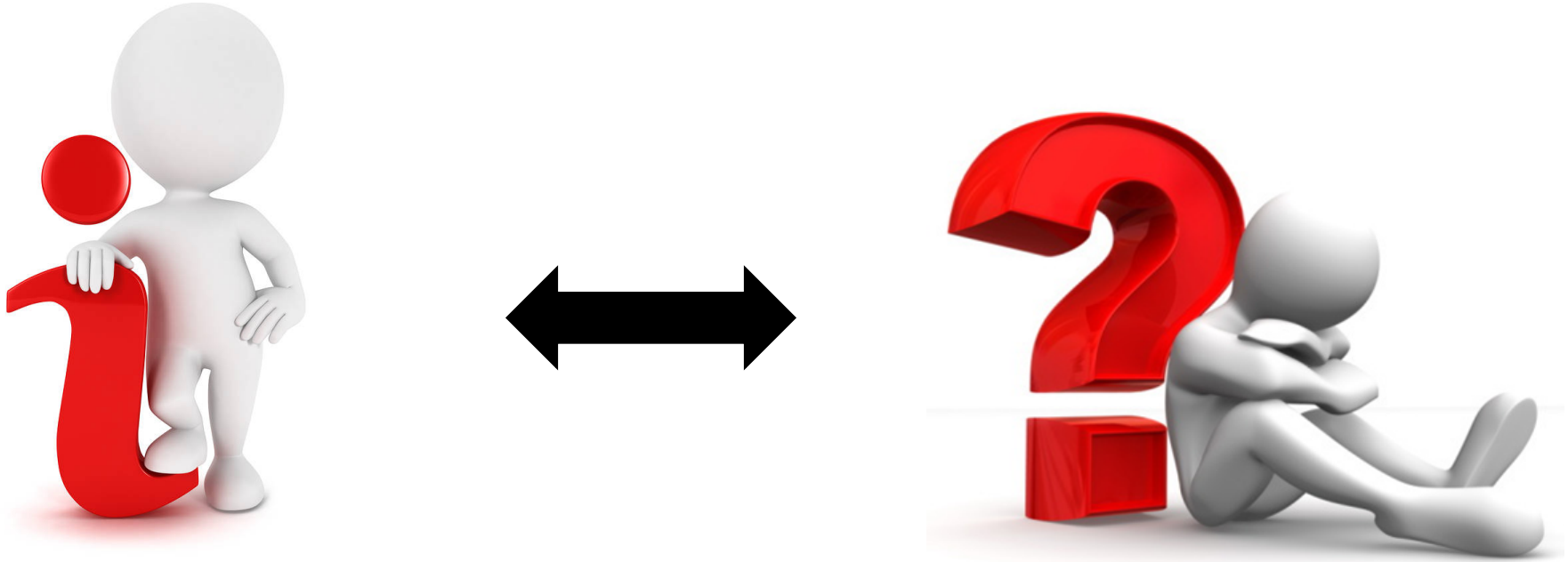
Custom debugger extensions

Do custom extensions help?



Compare efficiency with and without extension

Experienced vs inexperienced developers?



Learning from experienced developers

Debugging is difficult

Understand how developers use the debugger

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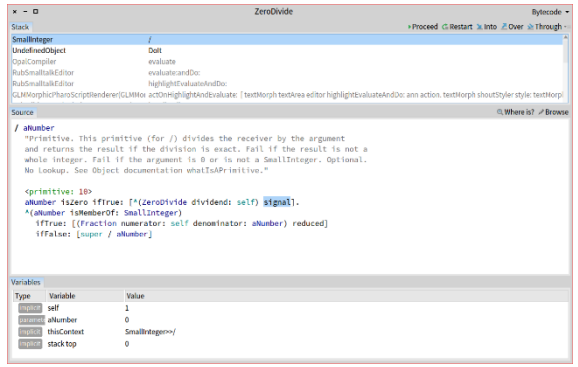
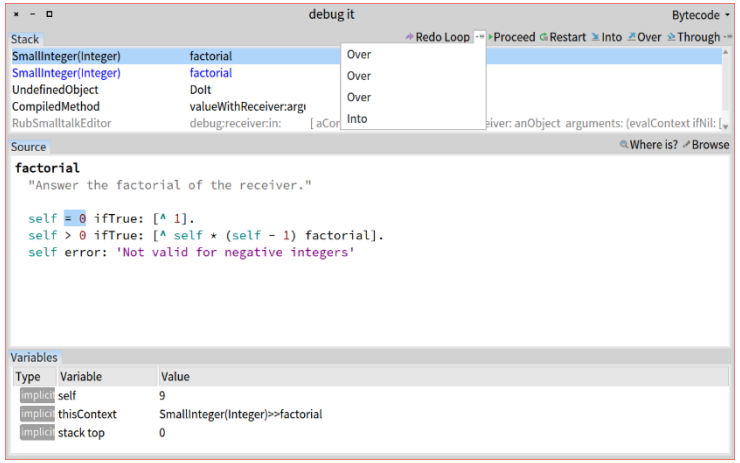


Provide better alternatives?



Many possible ways to continue?