Tracebacks



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Tracebacks

__traceback__

Attribute on an exception object that holds a reference to the its traceback object



traceback

Standard library module containing functions for working with traceback objects

Tracebacks

```
$ python -c "import chaining; chaining.main()"
<traceback object at 0x10fb7ad00>
   File "/private/var/folders/0k/58g36_tx22xcxqd9mwqzg_h00000gp/T/tmpvr75dr6v/sli
de_spec/repl-2/chaining.py", line 18, in main
    inclination(0, 5)
   File "/private/var/folders/0k/58g36_tx22xcxqd9mwqzg_h00000gp/T/tmpvr75dr6v/sli
de_spec/repl-2/chaining.py", line 13, in inclination
    raise InclinationError("Slope cannot be vertical") from e
Finished
$
```

More Traceback Functions



There are many more functions in the traceback module

format_tb() can render a traceback to a
string

Storing Tracebacks

Rendering

Try to render a traceback within the scope of the except block

Stack frames

Tracebacks contain references to their stack frames and, thus, to all of the locals in those frames

Memory usage

The transitive closure over the stack frames can use a lot of memory, and it won't be garbage collected until the traceback is released

Transform

For longer term storage, render tracebacks into a different, more concise form suited to your needs

Summary



Tracebacks in Python are objects

They are stored on __traceback__ on exceptions

The traceback module provides functions to work with tracebacks

Avoid storing tracebacks for too long