Reinteract
A better way to interact with Python

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Reinteract Demos

- The basics
- Re-interaction
- Fixing up your mistakes
- Docs and completions
- Plotting
- Partial re-evaluation
A scope per “chunk”

\[
N = 1000000
\]

\[
s = 0
\]

for \(i \in \text{xrange}(0, N)\):
    \[s += i\]

\[
s
\]

def sum_range(n):
    return \(\frac{n \times (n+1)}{2}\)

sum_range(N)

\[
\{N: 10000000\}
\]

\[
\{N: 10000000, s:0\}
\]

\[
\{N: 10000000, s:49999995000000\}
\]

\[
\{N: 10000000, s:49999995000000, \text{sum\_range}: \text{<function 'sum\_range'>}\}
\]

Can back up to any point
Shallow copies

\[ a = \text{range}(100000000) \]
\[ x = 1 \]

Don't need to copy everything
Finding mutations

\[ x = [1,2,3] \]
\[ x[0] = 4 \]

Not the same

Analyze syntax tree for mutations:

\[ x[0] = 4 \]
\[ x += [1] \]
\[ x.y.z = 3 \]
More Information

http://www.reinteract.org

- Source code
- Binaries for OS X, Windows
- Documentation
- Link to discussion group