:mod:'codeop' --- Compile Python code

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 1); backlink

Unknown interpreted text role "mod".

Unknown directive type "module".

```
.. module:: codeop
:synopsis: Compile (possibly incomplete) Python code.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 7)

Unknown directive type "sectionauthor".

.. sectionauthor:: Moshe Zadka <moshez@zadka.site.co.il>

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 8)

Unknown directive type "sectionauthor".

.. sectionauthor:: Michael Hudson <mwh@python.net>

Source code: :source:`Lib/codeop.py`

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 10); backlink

Unknown interpreted text role "source".

The mod: codeop' module provides utilities upon which the Python read-eval-print loop can be emulated, as is done in the mod: code' module. As a result, you probably don't want to use the module directly; if you want to include such a loop in your program you probably want to use the mod: code' module instead.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 14); backlink

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 14); backlink

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 14); backlink

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There are two parts to this job:

- 1. Being able to tell if a line of input completes a Python statement: in short, telling whether to print '>>>' or ' . . . ' next.
- 2. Remembering which future statements the user has entered, so subsequent input can be compiled with these in effect.

The :mod: codeop' module provides a way of doing each of these things, and a way of doing them both.

main\Doc\library\(cpython-main) (Doc) (library) codeop.rst, line 28); backlink Unknown interpreted text role "mod".

To do just the former:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 33)

Unknown directive type "function".

.. function:: compile command(source, filename="<input>", symbol="single")

Tries to compile *source*, which should be a string of Python code and return a code object if *source* is valid Python code. In that case, the filename attribute of the code object will be *filename*, which defaults to ``'<input>'``. Returns ``None`` if *source* is *not* valid Python code, but is a prefix of valid Python code.

If there is a problem with *source*, an exception will be raised. :exc:`SyntaxError` is raised if there is invalid Python syntax, and :exc:`OverflowError` or :exc:`ValueError` if there is an invalid literal.

The *symbol* argument determines whether *source* is compiled as a statement (``'single'``, the default), as a sequence of statements (``'exec'``) or as an :term:`expression` (``'eval'``). Any other value will cause :exc:`ValueError` to be raised.

.. note::

It is possible (but not likely) that the parser stops parsing with a successful outcome before reaching the end of the source; in this case, trailing symbols may be ignored instead of causing an error. For example, a backslash followed by two newlines may be followed by arbitrary garbage. This will be fixed once the API for the parser is better.

Instances of this class have methods identical in signature to the built-in function :func:`compile`, but with the difference that if the instance compiles program text containing a mod. future_ `statement, the instance 'remembers' and compiles all subsequent program texts with the statement in force.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 61); backlink

Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 61); backlink

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 61); backlink

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Instances of this class have :meth: __call__ `methods identical in signature to :func: `compile_command`; the difference is that if the instance compiles program text containing a __future__ statement, the instance 'remembers' and compiles all subsequent program texts with the statement in force.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) codeop.rst, line 70); backlink

Unknown interpreted text role 'meth'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main) (Doc) (library) codeop.rst, line 70); backlink

Unknown interpreted text role "func".