

Iterator Objects

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\ (cpython-main) (Doc) (c-api) iterator.rst, line 1)

Unknown directive type "highlight".

```
.. highlight:: c
```

Python provides two general-purpose iterator objects. The first, a sequence iterator, works with an arbitrary sequence supporting the `meth:``__getitem__``` method. The second works with a callable object and a sentinel value, calling the callable for each item in the sequence, and ending the iteration when the sentinel value is returned.

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Unknown interpreted text role "meth".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\c-api\ (cpython-main) (Doc) (c-api) iterator.rst, line 15)

Unknown directive type "c:var".

```
.. c:var:: PyTypeObject PySeqIter_Type
```

Type object for iterator objects returned by `:c:func:``PySeqIter_New``` and the one-argument form of the `:func:``iter``` built-in function for built-in sequence types.

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Unknown directive type "c:function".

```
.. c:function:: int PySeqIter_Check(op)
```

Return true if the type of `*op*` is `:c:data:``PySeqIter_Type```. This function always succeeds.

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Unknown directive type "c:function".

```
.. c:function:: PyObject* PySeqIter_New(PyObject *seq)
```

Return an iterator that works with a general sequence object, `*seq*`. The iteration ends when the sequence raises `:exc:``IndexError``` for the subscripting operation.

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Unknown directive type "c:var".

```
.. c:var:: PyTypeObject PyCallIter_Type
```

Type object for iterator objects returned by `:c:func:``PyCallIter_New``` and the two-argument form of the `:func:``iter``` built-in function.

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main\Doc\c-api\cpython-main) (Doc) (c-api) iterator.rst, line 41)

Unknown directive type "c:function".

```
.. c:function:: int PyCallIter_Check(op)
```

Return true if the type of *op* is :c:data:`PyCallIter_Type`. This function always succeeds.

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Unknown directive type "c:function".

```
.. c:function:: PyObject* PyCallIter_New(PyObject *callable, PyObject *sentinel)
```

Return a new iterator. The first parameter, *callable*, can be any Python callable object that can be called with no parameters; each call to it should return the next item in the iteration. When *callable* returns a value equal to *sentinel*, the iteration will be terminated.