Iterator Objects

Python provides two general-purpose iterator objects. The first, a sequence iterator, works with an arbitrary sequence supporting the <u>__getitem__()</u> 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.

PyTypeObject PySeqIter_Type

Type object for iterator objects returned by PySeqIter_New() and the one-argument form of the iter() built-in function for built-in sequence types.

int **PySeqIter_Check**(op)

Return true if the type of op is PySeqIter Type.

PyObject* PySeqIter_New(PyObject *seq)

Return value: New reference.

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

PyTypeObject PyCallIter_Type

Type object for iterator objects returned by PyCallIter_New() and the two-argument form of the iter() built-in function.

int PyCallIter Check(op)

Return true if the type of op is PyCallIter_Type.

PyObject* PyCallIter_New(PyObject *callable, PyObject *sentinel)

Return value: New reference.

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.