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In [1]: a=['hey','bro','you'e','awesome']

In [2]: for i in a:
        print(i)

hey
bro
you"e
awesome

In [3]: dir(a)

Out[3]: ['__add__',
        '__class__',
        '__contains__',
        '__delattr__',
        '__delitem__',
        '__dir__',
        '__doc__',
        '__eq__',
        '__format__',
        '__ge__',
        '__getattr__',
        '__getitem__',
        '__gt__',
        '__hash__',
        '__iadd__',
        '__imul__',
        '__init__',
        '__init_subclass__',
        '__iter__',
        '__le__',
        '__len__',
        '__lt__',
        '__mul__',
        '__ne__',
        '__new__',
        '__reduce__',
        '__reduce_ex__',
        '__repr__',
        '__reversed__',
        '__rmul__',
        '__setattr__',
        '__setitem__',
        '__sizeof__',
        '__str__',
        '__subclasshook__',
        'append',
        'clear',
        'copy',
        'count',
        'extend',
        'index',
        'insert',
        'pop',
        'remove',
        'reverse',
        'sort']

In [4]: itr=iter(a)

In [5]: next(itr)

Out[5]: 'hey'

In [6]: next(itr)

Out[6]: 'bro'

In [7]: next(itr)

Out[7]: 'you"e'

In [8]: next(itr)

Out[8]: 'awesome'

In [9]: next(itr)

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StopIteration                                Traceback (most recent call last)
<ipython-input-9-6693cc261707> in <module>
----> 1 next(itr)

StopIteration:

In [10]: for i in [1,2,3,4]:
        print(i)

1
2
3
4

In [12]: for i in (1,2,3,4):
        print(i)

1
2
3
4

In [13]: for i in {'one':1,'two':2}:
        print(i)

one
two

In [14]: dics={'one':1,'two':2}

In [16]: for i in dics:
        print(i)

one
two

In [21]: for i in dics.items():
        print(i)

('one', 1)
('two', 2)

In [22]: for i in dics.keys():
        print(i)

one
two

In [24]: for i in "raghul":
        print(i)

r
a
g
h
u
l

In [28]: for i in open('gowtham.txt'):
        print(i,end='')

i am gowtham i am studying data science and analytics

In [29]: itr=reversed(a)

In [31]: next(itr)

Out[31]: 'awesome'

In [32]: next(itr)

Out[32]: 'you"e'

In [71]: class acremote():
        def __init__(self):
            self.temperature=[16,17,18,19,20,21,22,23,24,25,26,27]
            self.index=-1
        def __iter__(self):
            return(self)
        def __next__(self):
            self.index +=1
            if self.index==len(self.temperature):
                raise StopIteration
            return self.temperature[self.index]

In [72]: a=acremote()

In [73]: b=iter(a)

In [74]: print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))
print(next(b))

16
17
18
19
20
21
22
23
24
25
26
27

-----
StopIteration                                Traceback (most recent call last)
<ipython-input-74-d0e5bdee6972> in <module>
    11 print(next(b))
    12 print(next(b))
--> 13 print(next(b))

<ipython-input-71-f03d0aa1d1eb> in __next__(self)
      8         self.index +=1
      9         if self.index==len(self.temperature):
--> 10             raise StopIteration
     11         return self.temperature[self.index]

StopIteration:

In [75]: ##generators

In [84]: def remote_control():
        yield "cnn"
        yield "espn"

In [85]: itr=remote_control()

In [86]: next(itr)

Out[86]: 'cnn'

In [ ]:

In [87]: def fib():
        a,b=0,1
        while True:
            yield a
            a,b=b,b+a
        for f in fib():
            if f>50:
                break
            print(f)

0
1
1
2
3
5
8
13
21
34

In [81]: a=fib()

In [83]: next(a)

Out[83]: 0

In [ ]:
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