

Last login: Sun Mar 11 14:16:45 on ttys000

Hansen@Hansens-MacBook-Pro:~ \$ " python

Python 2.7.12 |Anaconda custom (x86_64)| (default, Jul 2 2016, 17:43:17)
[GCC 4.2.1 (Based on Apple Inc. build 5658) (LLVM build 2336.11.00)] on darwin
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```
>>> a = 5
```

```
>>> print a
```

```
5
```

```
>>> exit()
```

Hansen@Hansens-MacBook-Pro:~ \$ " ipython

Python 2.7.12 |Anaconda custom (x86_64)| (default, Jul 2 2016, 17:43:17)
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IPython 4.2.0 -- An enhanced Interactive Python.

? -> Introduction and overview of IPython's features.

%quickref -> Quick reference.

help -> Python's own help system.

object? -> Details about 'object', use 'object??' for extra details.

```
In [1]: %run *.py
```

```
ERROR: File `u'*.py'` not found.
```

```
In [2]: a = [1, 2, 3]
```

```
In [3]: b = a, print b
```

```
File "<ipython-input-3-5f56d82f8c72>", line 1
```

```
    b = a, print b
```

```
        ^
```

```
SyntaxError: invalid syntax
```

```
In [4]: b = a
```

```
In [5]: print b
```

```
[1, 2, 3]
```

```
In [6]: a.append(4)
```

```
In [7]: print b
```

```
[1, 2, 3, 4]
```

```
In [8]: def append_element(some_list, element):
```

```
    ...:     some_list.append(element)
```

```
    ...:
```

```
In [9]: append_element(b, 5)
```

```
In [10]: b
```

```
Out[10]: [1, 2, 3, 4, 5]
```

```
In [11]: type b
```

```
File "<ipython-input-11-c0422199a627>", line 1
```

```
    type b
```

```
        ^
```

```
SyntaxError: invalid syntax
```

```
In [12]: type(b)
```

```
Out[12]: list
```

```
In [13]: type(app)
```

```
append_element apply
```

```
In [13]: type(append_element)
```

```
Out[13]: function
```

```
In [14]: b.type()
```

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-14-9c8d482dea7b> in <module>()
----> 1 b.type()
```

```
AttributeError: 'list' object has no attribute 'type'
```

```
In [15]: b.type
```

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-15-cfdddce5ebf1> in <module>()
----> 1 b.type
```

```
AttributeError: 'list' object has no attribute 'type'
```

```
In [16]: '5' + 5
```

```
-----
TypeError                                    Traceback (most recent call last)
<ipython-input-16-f9dbf5f0b234> in <module>()
----> 1 '5' + 5
```

```
TypeError: cannot concatenate 'str' and 'int' objects
```

```
In [17]: isinstance(a, list)
```

```
Out[17]: True
```

```
In [18]: isinstance(a, (list, int))
```

```
Out[18]: True
```

```
In [19]: isinstance(a, (function, int))
```

```
-----
NameError                                    Traceback (most recent call last)
<ipython-input-19-9597cc1043db> in <module>()
----> 1 isinstance(a, (function, int))
```

```
NameError: name 'function' is not defined
```

```
In [20]: isinstance(a, (func, int))
```

```
-----
NameError                                    Traceback (most recent call last)
<ipython-input-20-fddc2e70ec6f> in <module>()
----> 1 isinstance(a, (func, int))
```

```
NameError: name 'func' is not defined
```

```
In [21]: isinstance(a, (double, int))
```

```
-----
NameError                                    Traceback (most recent call last)
<ipython-input-21-7b70fbd3267d> in <module>()
----> 1 isinstance(a, (double, int))
```

```
NameError: name 'double' is not defined
```

```
In [22]: isinstance(a, (float, int))
```

```
Out[22]: False
```

```
In [23]: a.
```

```
a.append    a.count    a.extend    a.index    a.insert    a.pop        a.remove    a.reverse    a.sort
```

```
In [23]: app
```

```
append_element    apply
```

```
In [23]: append_element.
```

```
append_element.func_closure    append_element.func_dict    append_element.func_name
append_element.func_code       append_element.func_doc
append_element.func_defaults   append_element.func_globals
```

```
In [23]: append_element.func_d
append_element.func_defaults  append_element.func_dict      append_element.func_doc
```

```
In [23]: append_element.func_doc
```

```
In [24]: getattr(a, 'split')
```

```
-----
AttributeError                                Traceback (most recent call last)
```

```
<ipython-input-24-a5ca0e8ef764> in <module>()
```

```
----> 1 getattr(a, 'split')
```

```
AttributeError: 'list' object has no attribute 'split'
```

```
In [25]: getattr(a, 'index')
```

```
Out[25]: <function index>
```

```
In [26]: def isiterable(obj):
.....:     try:
.....:         iter(obj)
.....:         return True
.....:     except TypeError: # not iterable
.....:         return False
.....:
```

```
In [27]: is
is         isinstance  isiterable  issubclass
```

```
In [27]: isi
isinstance isiterable
```

```
In [27]: isiterable('a string')
```

```
Out[27]: True
```

```
In [28]: isiterable(5)
```

```
Out[28]: False
```

```
In [29]: list(a)
```

```
Out[29]: [1, 2, 3, 4, 5]
```

```
In [30]: a = c
```

```
-----
NameError                                Traceback (most recent call last)
```

```
<ipython-input-30-a51922ec7f8f> in <module>()
```

```
----> 1 a = c
```

```
NameError: name 'c' is not defined
```

```
In [31]: c = list(a)
```

```
In [32]: a = c
```

```
In [33]: a is c
```

```
Out[33]: True
```

```
In [34]: b is c
```

```
Out[34]: False
```

```
In [35]: b is a
```

```
Out[35]: False
```

```
In [36]: c is a
```

```
Out[36]: True
```

```
In [37]: a
```

```
Out[37]: [1, 2, 3, 4, 5]
```

```
In [38]: b
```

```
Out[38]: [1, 2, 3, 4, 5]
```

```
In [39]: c
Out[39]: [1, 2, 3, 4, 5]
```

```
In [40]: cval = 1 + 2j
```

```
In [41]: cval ** 2
Out[41]: (-3+4j)
```

```
In [42]: a = 'this is a string'
```

```
In [43]: a[10] = 'f'
```

```
-----
TypeError                                 Traceback (most recent call last)
<ipython-input-43-5ca625d1e504> in <module>()
----> 1 a[10] = 'f'
```

```
TypeError: 'str' object does not support item assignment
```

```
In [44]: a = a.replace("string", "longer string")
```

```
In [45]: a
Out[45]: 'this is a longer string'
```

```
In [46]: s = r'this\is\no\special\characters'
```

```
In [47]: s
Out[47]: 'this\\is\\no\\special\\characters'
```

```
In [48]: template = '%.2f %s are worth $%d'
```

```
In [49]: template % (4.5560, 'Argentine Pesos', 1)
Out[49]: '4.56 Argentine Pesos are worth $1'
```

```
In [50]: template % (4.5560, 'Argentine Pesos', 1.0)
Out[50]: '4.56 Argentine Pesos are worth $1'
```

```
In [51]: template = '%.2f %s are worth $%f'
```

```
In [52]: template % (4.5560, 'Argentine Pesos', 1)
Out[52]: '4.56 Argentine Pesos are worth $1.000000'
```

```
In [53]: template % (4.5560, 222, 1)
Out[53]: '4.56 222 are worth $1.000000'
```

```
In [54]: template % (4.5560, u66, 1)
```

```
-----
NameError                                 Traceback (most recent call last)
<ipython-input-54-6e0e3db768fc> in <module>()
----> 1 template % (4.5560, u66, 1)
```

```
NameError: name 'u66' is not defined
```

```
In [55]: template % (4.5560, u'66', 1)
Out[55]: u'4.56 66 are worth $1.000000'
```

```
In [56]: template % (4.5560, 'u66', 1)
Out[56]: '4.56 u66 are worth $1.000000'
```

```
In [57]: bool([]), bool([])
Out[57]: (False, False)
```

```
In [58]: bool([]), bool([''])
Out[58]: (False, True)
```

```
In [59]: def add_and_maybe_multiply(a, b, c = None):
.....:     result = a + b
.....:     i
```

```
%install_default_config if int isiterable
%install_ext import intern issubclass
%install_profiles in is iter
id input isinstance
....: if c is not None:
....:     result = result * c
....:
```

In [60]: add_and_maybe_multiply

Out[60]: <function __main__.add_and_maybe_multiply>

In [61]: add_and_maybe_multiply

add_and_maybe_multiply

In [61]: add_and_maybe_multiply.

```
add_and_maybe_multiply.func_closure add_and_maybe_multiply.func_doc
add_and_maybe_multiply.func_code add_and_maybe_multiply.func_globals
add_and_maybe_multiply.func_defaults add_and_maybe_multiply.func_name
add_and_maybe_multiply.func_dict
```

In [61]: add_and_maybe_multiply.func_func_code

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-61-adb28ac622a8> in <module>()
----> 1 add_and_maybe_multiply.func_func_code
```

AttributeError: 'function' object has no attribute 'func_func_code'

In [62]: add_and_maybe_multiply.func_code

Out[62]: <code object add_and_maybe_multiply at 0x104056330, file "<ipython-input-59-191127aaab70>", line 1>

In [63]: from datetime import datetime, date, time

In [64]: dt = datetime(2018, 03, 11, 20, 23, 31)

In [65]: dt.day

Out[65]: 11

In [66]: dt.month

Out[66]: 3

In [67]: dt.second

Out[67]: 31

In [68]: dt.strftime('%m/%d/%Y %H:%M')

Out[68]: '03/11/2018 20:23'

In [69]: dt = datetime(2018, 3, 11, 20, 23, 31)

In [70]: dt.strftime('%m/%d/%Y %H:%M')

Out[70]: '03/11/2018 20:23'

In [71]: def attempt_float(x):

```
....:     try:
....:         return float(x)
....:     except:
....:         return x 'cannot be transformed'
....:
```

```
File "<ipython-input-71-3de41e972f77>", line 5
    return x 'cannot be transformed'
            ^
```

SyntaxError: invalid syntax

In [72]: def attempt_float(x):

```
    try:
        return float(x)
```

```

except:
    return 'cannot be transformed'
....:

In [73]: seq = [1, string]
-----
NameError                                Traceback (most recent call last)
<ipython-input-73-9cf8714dcdb0> in <module>()
----> 1 seq = [1, string]

NameError: name 'string' is not defined

In [74]: seq = [1, 'string']

In [75]: for item in seq:
....:     attempt_float(item)
....:

In [76]: for item in seq:
....:     print attempt_float(item)
....:
1.0
cannot be transformed

In [77]: tup = tuple(['string',666])

In [78]: tup
Out[78]: ('string', 666)

In [79]: tup = tuple('string')

In [80]: top
-----
NameError                                Traceback (most recent call last)
<ipython-input-80-facdca2fa687> in <module>()
----> 1 top

NameError: name 'top' is not defined

In [81]: tup
Out[81]: ('s', 't', 'r', 'i', 'n', 'g')

In [82]: tup = ('666')

In [83]: tup * 6
Out[83]: '66666666666666666666'

In [84]: tup = ('666',)

In [85]: tup * 6
Out[85]: ('666', '666', '666', '666', '666', '666')

In [86]: sep = ((1,2,3), (4,5,6), (7,8,9))

In [87]: for a, b, c in seq:
....:     print c
....:
-----
TypeError                                Traceback (most recent call last)
<ipython-input-87-56b379b27aad> in <module>()
----> 1 for a, b, c in seq:
      2     print c
      3

TypeError: 'int' object is not iterable

In [88]: sep = [(1,2,3), (4,5,6), (7,8,9)]

```

```
In [89]: for a, b, c in seq:
        print c
        ....:
```

```
-----
TypeError                                 Traceback (most recent call last)
<ipython-input-89-56b379b27aad> in <module>()
----> 1 for a, b, c in seq:
      2     print c
      3
```

TypeError: 'int' object is not iterable

```
In [90]: a
Out[90]: 'this is a longer string'
```

```
In [91]: b
Out[91]: [1, 2, 3, 4, 5]
```

```
In [92]: c
Out[92]: [1, 2, 3, 4, 5]
```

```
In [93]: for x, y, z in seq:
        ....:     print z
        ....:
```

```
-----
TypeError                                 Traceback (most recent call last)
<ipython-input-93-878b5db4de61> in <module>()
----> 1 for x, y, z in seq:
      2     print z
      3
```

TypeError: 'int' object is not iterable

```
In [94]: for x, y, z in seq:
        ....:     pass
        ....:
```

```
-----
TypeError                                 Traceback (most recent call last)
<ipython-input-94-9bd34efc9e31> in <module>()
----> 1 for x, y, z in seq:
      2     pass
      3
```

TypeError: 'int' object is not iterable

```
In [95]: x
```

```
-----
NameError                                 Traceback (most recent call last)
<ipython-input-95-401b30e3b8b5> in <module>()
----> 1 x
```

NameError: name 'x' is not defined

```
In [96]: y
```

```
-----
NameError                                 Traceback (most recent call last)
<ipython-input-96-009520053b00> in <module>()
----> 1 y
```

NameError: name 'y' is not defined

```
In [97]: z
```

```
-----
NameError                                 Traceback (most recent call last)
<ipython-input-97-a8a78d0ff555> in <module>()
----> 1 z
```

NameError: name 'z' is not defined

```
In [98]: for (x, y, z,) in seq:
.....:     print z
.....:
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-98-e76338113b55> in <module>()
----> 1 for (x, y, z,) in seq:
      2     print z
      3
```

TypeError: 'int' object is not iterable

```
In [99]: for (x, y, z) in seq:
.....:     print 1
.....:
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-99-8775d8b20862> in <module>()
----> 1 for (x, y, z) in seq:
      2     print 1
      3
```

TypeError: 'int' object is not iterable

```
In [100]: for item in seq:
.....:     print item
.....:
```

```
1
string
```

```
In [101]: seq
Out[101]: [1, 'string']
```

```
In [102]: seq = [(1,2,3), (4,5,6), (7,8,9)]
```

```
In [103]: for (x, y, z,) in seq:
.....:     print z
.....:
3
6
9
```

```
In [104]: seq.
seq.append    seq.extend    seq.insert    seq.remove    seq.sort
seq.count     seq.index    seq.pop       seq.reverse
```

```
In [104]: seq.sour()
```

```
-----
AttributeError                            Traceback (most recent call last)
<ipython-input-104-83254eafc3a1> in <module>()
----> 1 seq.sour()
```

AttributeError: 'list' object has no attribute 'sour'

```
In [105]: seq.sout()
```

```
-----
AttributeError                            Traceback (most recent call last)
<ipython-input-105-58c1d091bd7e> in <module>()
----> 1 seq.sout()
```

AttributeError: 'list' object has no attribute 'sout'

```
In [106]: seq.sort()
```

```
In [107]: seq
Out[107]: [(1, 2, 3), (4, 5, 6), (7, 8, 9)]
```



```
In [108]: list = [1,2,3]
```

```
In [109]: list.
```

```
list.append    list.extend    list.insert    list.remove    list.sort  
list.count     list.index    list.pop       list.reverse
```

```
In [109]: list.append(1)
```

```
In [110]: list
```

```
Out[110]: [1, 2, 3, 1]
```

```
In [111]: list.remove(1)
```

```
In [112]: list
```

```
Out[112]: [2, 3, 1]
```

```
In [113]: 2 in list
```

```
Out[113]: True
```

```
In [114]: Null in list
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-114-002e556b6808> in <module>()  
----> 1 Null in list
```

```
NameError: name 'Null' is not defined
```

```
In [115]: NULL in list
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-115-e382a63c2e5d> in <module>()  
----> 1 NULL in list
```

```
NameError: name 'NULL' is not defined
```

```
In [116]: NOnE
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-116-d66c3aa5650a> in <module>()  
----> 1 NOnE
```

```
NameError: name 'NOnE' is not defined
```

```
In [117]: None
```

```
In [118]: None in list
```

```
Out[118]: False
```

```
In [119]: list = ()
```

```
In [120]: list = []
```

```
In [121]: None in list
```

```
Out[121]: False
```

```
In [122]: list = [ ]
```

```
In [123]: None in list
```

```
Out[123]: False
```

```
In [124]: list = None
```

```
In [125]: None in list
```

```
-----  
TypeError                                Traceback (most recent call last)  
<ipython-input-125-ab39de7a2fef> in <module>()  
----> 1 None in list
```

TypeError: argument of type 'NoneType' is not iterable

```
In [126]: list = [1,2,3,4,5]
```

```
In [127]: list.sort()?
```

```
File "<ipython-input-127-7aefcf853b8b>", line 1
    list.sort()?
      ^
```

SyntaxError: invalid syntax

```
In [128]: list.sort?
```

Docstring:

L.sort(cmp=None, key=None, reverse=False) -- stable sort *IN PLACE*;
cmp(x, y) -> -1, 0, 1

Type: builtin_function_or_method

```
In [129]: list.
```

```
list.append    list.extend    list.insert    list.remove    list.sort
list.count     list.index     list.pop       list.reverse
```

```
In [129]: seq1 = ['foo', 'bar', 'baz']
```

```
In [130]: seq2 = ['one', 'two', 'three']
```

```
In [131]: for i, (a,b) in enumerate(zip(seq1, seq2)):
```

```
.....:     print('%d: %s, %s' % (i, a, b))
.....:
```

0: foo, one

1: bar, two

2: baz, three

```
In [132]: for (a,b), i in enumerate(zip(seq1, seq2)):
```

```
    print('%d: %s, %s' % (i, a, b))
```

```
.....:
```

TypeError Traceback (most recent call last)

<ipython-input-132-9aa91f1375d8> in <module>()

```
----> 1 for (a,b), i in enumerate(zip(seq1, seq2)):
```

```
      2     print('%d: %s, %s' % (i, a, b))
```

```
      3
```

TypeError: 'int' object is not iterable

```
In [133]: zip(seq1, seq2)
```

```
Out[133]: [('foo', 'one'), ('bar', 'two'), ('baz', 'three')]
```

```
In [134]: enumerate(zip(seq1, seq2))
```

```
Out[134]: <enumerate at 0x1040b2910>
```

```
In [135]: print enumerate(zip(seq1, seq2))
```

```
<enumerate object at 0x1040b2fa0>
```

```
In [136]: pitchers = [('Nolan', 'Ryan'), ('Roger', 'Clemens'), ('Schilling', 'Curt')]
```

```
In [137]: first_names, last_names = unzip(*pitchers)
```

NameError Traceback (most recent call last)

<ipython-input-137-c37b148a3120> in <module>()

```
----> 1 first_names, last_names = unzip(*pitchers)
```

NameError: name 'unzip' is not defined

```
In [138]: first_names, last_names = zip(*pitchers)
```

```
In [139]: first_names
```

```
Out[139]: ('Nolan', 'Roger', 'Schilling')
```

```
In [140]: {2, 1, 2, 1, 3, 3}
```

```
Out[140]: {1, 2, 3}
```

```
In [141]: a = {1, 2, 3, 4, 5}
```

```
In [142]: b = {3, 4, 5, 6, 7, 8}
```

```
In [143]: a | b
```

```
Out[143]: {1, 2, 3, 4, 5, 6, 7, 8}
```

```
In [144]: a & b
```

```
Out[144]: {3, 4, 5}
```

```
In [145]: a - b
```

```
Out[145]: {1, 2}
```

```
In [146]: b - a
```

```
Out[146]: {6, 7, 8}
```

```
In [147]: a ^ b
```

```
Out[147]: {1, 2, 6, 7, 8}
```

```
In [148]: strings = ['a', 'as', 'bat', 'car', 'dove', 'python']
```

```
In [149]: x.upper() for x in strings if len(x) > 2
```

```
File "<ipython-input-149-81b257eb5a6a>", line 1
```

```
    x.upper() for x in strings if len(x) > 2
```

```
    ^
```

```
SyntaxError: invalid syntax
```

```
In [150]: x.upper( ) for x in strings if len(x) > 2
```

```
File "<ipython-input-150-6a34ff6cdc5e>", line 1
```

```
    x.upper( ) for x in strings if len(x) > 2
```

```
    ^
```

```
SyntaxError: invalid syntax
```

```
In [151]: [x.upper( ) for x in strings if len(x) > 2]
```

```
Out[151]: ['BAT', 'CAR', 'DOVE', 'PYTHON']
```

```
In [152]: for x in strings:
```

```
    .....:     if len(x) > 2
```

```
    .....:         a.append(x.upper())
```

```
    .....:
```

```
File "<ipython-input-152-038270ec7ce4>", line 2
```

```
    if len(x) > 2
```

```
    ^
```

```
SyntaxError: invalid syntax
```

```
In [153]: for x in strings:
```

```
    if len(x) > 2:
```

```
    .....:         strings.append(x.upper())
```

```
    .....:
```

```
^C-----
KeyboardInterrupt                                Traceback (most recent call last)
<ipython-input-153-4d7d3de8c57a> in <module>()
    1 for x in strings:
```

```

2         if len(x) > 2:
----> 3             strings.append(x.upper())
4

```

KeyboardInterrupt:

```

In [154]: for x in strings:
           if len(x) > 2:
               strings.append(x.upper())
           ....:

```

^C-----

KeyboardInterrupt Traceback (most recent call last)

```

<ipython-input-154-952e878b1199> in <module>()
      1 for x in strings:
      2     if len(x) > 2:
----> 3         strings.append(x.upper())
      4

```

KeyboardInterrupt:

```

In [155]: for x in strings:
           ....:     if len(x) > 2:
           ....:         print x
           ....:
File "<ipython-input-155-30ff01d7adb9>", line 3
      print x
      ^

```

IndentationError: expected an indented block

If you want to paste code into IPython, try the %paste and %cpaste magic functions.

```

In [156]: for x in strings:
           if len(x) > 2:
               print x

```

Display all 583 possibilities? (y or n)

%%!	_	_i7
%%HTML	_10	_i70
%%SVG	_101	_i71
%%bash	_107	_i72
%%capture	_110	_i73
%%debug	_112	_i74
%%file	_113	_i75
%%html	_118	_i76
%%javascript	_12	_i77
%%latex	_121	_i78
%%perl	_123	_i79
%%prun	_13	_i8
%%pypy	_133	_i80
%%python	_134	_i81
%%python2	_139	_i82
%%python3	_140	_i83
%%ruby	_143	_i84
%%script	_144	_i85
%%sh	_145	_i86
%%svg	_146	_i87
%%sx	_147	_i88
%%system	_151	_i89
%%time	_17	_i9
%%timeit	_18	_i90
%%writefile	_22	_i91
%alias	_25	_i92

%alias_magic	_27	_i93
%autocall	_28	_i94
%autoindent	_29	_i95
%automagic	_33	_i96
%bookmark	_34	_i97
%cat	_35	_i98
%cd	_36	_i99
%clear	_37	_ih
%colors	_38	_ii
%config	_39	_iii
%cp	_41	_oh
%cpaste	_45	_sh
%debug	_47	a
%dhist	_49	abs
%dirs	_50	add_and_maybe_multiply
%doctest_mode	_52	all
%ed	_53	amber_test
%edit	_55	anaconda
%env	_56	and
%gui	_57	android
%hist	_58	any
%history	_60	append_element
%install_default_config	_62	apply
%install_ext	_65	as
%install_profiles	_66	assert
%killbgscripts	_67	attempt_float
%ldir	_68	b
%less	_70	basestring
%lf	_78	bin
%lk	_81	bool
%ll	_83	break
%load	_85	buffer
%load_ext	_90	bytearray
%loadpy	_91	bytes
%logoff	_92	c
%logon	--	callable
%logstart	--IPYTHON--	chr
%logstate	--IPYTHON__active	class
%logstop	---	classmethod
%ls	--builtin--	cmp
%lsmagic	--debug--	coerce
%lx	--doc--	compile
%macro	--import--	complex
%magic	--name--	continue
%man	--package--	copyright
%matplotlib	_dh	credits
%mkdir	_i	curl
%more	_i1	cval
%mv	_i10	date
%notebook	_i100	datetime
%page	_i101	def
%paste	_i102	del
%pastebin	_i103	delattr
%pdb	_i104	dict
%pdef	_i105	dir
%pdoc	_i106	divmod
%pfile	_i107	dreload
%pinfo	_i108	dt
%pinfo2	_i109	elif
%popd	_i11	else
%pprint	_i110	enumerate
%precision	_i111	eval
%profile	_i112	except
%prun	_i113	exec
%psearch	_i114	execfile
%psource	_i115	exit
%pushd	_i116	experiments
%pwd	_i117	file

%pycat	_i118	filter
%pylab	_i119	finally
%quickref	_i12	first_names
%recall	_i120	float
%rehashx	_i121	for
%reload_ext	_i122	format
%rep	_i123	from
%rerun	_i124	frozenset
%reset	_i125	get_ipython
%reset_selective	_i126	getattr
%rm	_i127	global
%rmdir	_i128	globals
%run	_i129	hasattr
%save	_i13	hash
%sc	_i130	help
%set_env	_i131	hex
%store	_i132	i
%sx	_i133	id
%system	_i134	if
%tb	_i135	import
%time	_i136	in
%timeit	_i137	input
%unalias	_i138	int
%unload_ext	_i139	intern
%who	_i14	is
%who_ls	_i140	isinstance
%whos	_i141	isiterable
%xdel	_i142	issubclass
%xmode	_i143	item
Applications	_i144	iter
ArithmeticError	_i145	lambda
AssertionError	_i146	last_names
AttributeError	_i147	len
BaseException	_i148	license
BufferError	_i149	list
BytesWarning	_i15	locals
Creative\ Cloud\ Files	_i150	long
DeprecationWarning	_i151	map
Desktop	_i152	max
Developer	_i153	memoryview
Documents	_i154	min
Downloads	_i155	next
Dropbox	_i16	nohup.out
EOFError	_i17	not
Ellipsis	_i18	object
EnvironmentError	_i19	oct
Exception	_i2	open
False	_i20	or
FloatingPointError	_i21	ord
FutureWarning	_i22	pass
GeneratorExit	_i23	pitchers
IOError	_i24	pow
ImportError	_i25	print
ImportWarning	_i26	property
In	_i27	quit
IndentationError	_i28	raise
IndexError	_i29	range
KeyError	_i3	raw_input
KeyboardInterrupt	_i30	reduce
Library	_i31	reload
LookupError	_i32	repr
MDIGB0_ideal.xbgf	_i33	requirement.txt
Mathematica	_i34	return
MemoryError	_i35	reversed
Movies	_i36	round
Music	_i37	s
NameError	_i38	seaborn-data
None	_i39	sep

NotImplemented	_i4	seq
NotImplementedError	_i40	seq1
OSError	_i41	seq2
Out	_i42	set
OverflowError	_i43	setattr
Parallels	_i44	slice
PendingDeprecationWarning	_i45	solarized
Pictures	_i46	sorted
Public	_i47	staticmethod
PycharmProjects	_i48	str
ReferenceError	_i49	strings
RuntimeError	_i5	sum
RuntimeWarning	_i50	super
StandardError	_i51	template
StopIteration	_i52	texput.log
SyntaxError	_i53	time
SyntaxWarning	_i54	try
SystemError	_i55	tup
SystemExit	_i56	tuple
TabError	_i57	type
True	_i58	unichr
TypeError	_i59	unicode
UnboundLocalError	_i6	vars
UnicodeDecodeError	_i60	while
UnicodeEncodeError	_i61	with
UnicodeError	_i62	x
UnicodeTranslateError	_i63	xrange
UnicodeWarning	_i64	y
Untitled.ipynb	_i65	yield
UserWarning	_i66	z
ValueError	_i67	zip
Warning	_i68	
ZeroDivisionError	_i69	

```
In [156]: for x in strings:
            if len(x) > 2:
                print x
Display all 583 possibilities? (y or n)
```

%%!	-	_i7
%%HTML	_10	_i70
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%%svg	_146	_i87
%%sx	_147	_i88
%%system	_151	_i89
%%time	_17	_i9
%%timeit	_18	_i90
%%writefile	_22	_i91
%alias	_25	_i92
%alias_magic	_27	_i93
%autocall	_28	_i94
%autoindent	_29	_i95
%automagic	_33	_i96

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%colors	_38	_ii
%config	_39	_iii
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%debug	_47	a
%dhist	_49	abs
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%doctest_mode	_52	all
%ed	_53	amber_test
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%ldir	_68	b
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%lsmagic	--debug__	coerce
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%macro	--import__	complex
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%pfile	_i107	dreload
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UnicodeTranslateError	_i63	xrange
UnicodeWarning	_i64	y
Untitled.ipynb	_i65	yield
UserWarning	_i66	z
ValueError	_i67	zip
Warning	_i68	
ZeroDivisionError	_i69	

```
In [156]: for x in strings:
          if len(x) > 2:print x
          .....:     print x
          .....:
File "<ipython-input-156-627ca7a4225f>", line 3
    print x
        ^
```

IndentationError: unindent does not match any outer indentation level

If you want to paste code into IPython, try the %paste and %cpaste magic functions.

```
In [157]: for x in strings:
          if len(x) > 2:
          .....:     print x
          .....:
```

```
bat
car
dove
python
BAT
CAR
DOVE
PYTHON
BAT
CAR
DOVE
PYTHON
BAT
CAR
DOVE
PYTHON
BAT
CAR
DOVE
PYTHON
BAT
CAR
DOVE
```

[illegible]