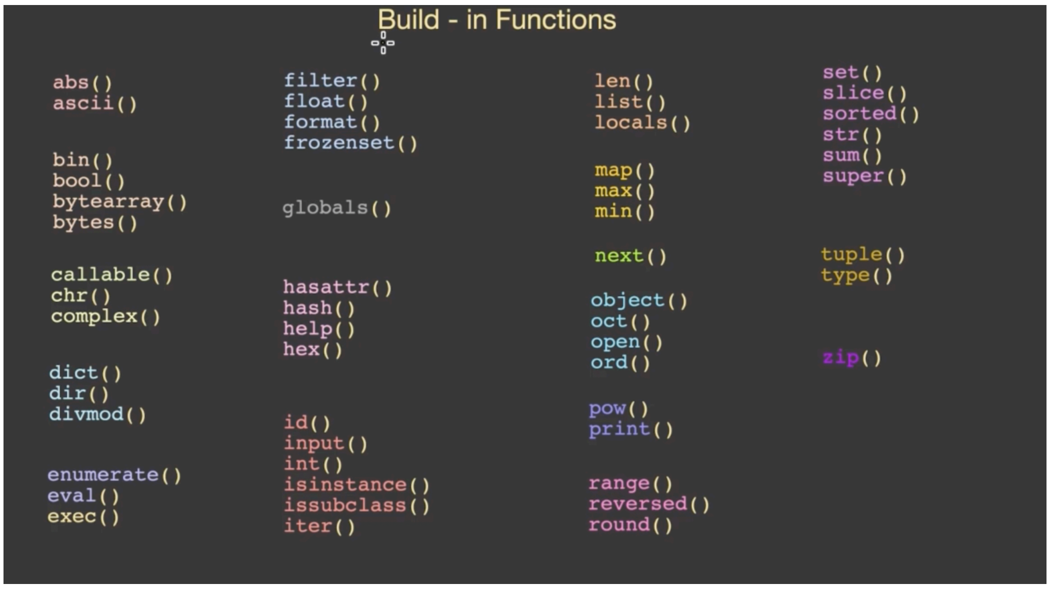
Build-in Function #1

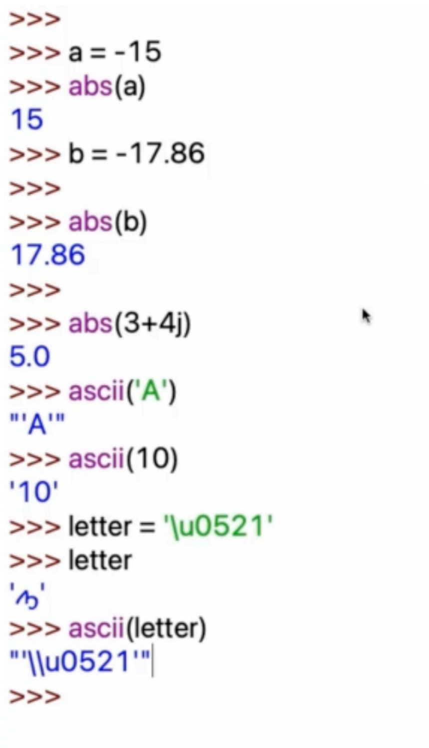
- They are many Build-in Functions / global functions available in python
- The Build-in Functions are



Build - in Functions

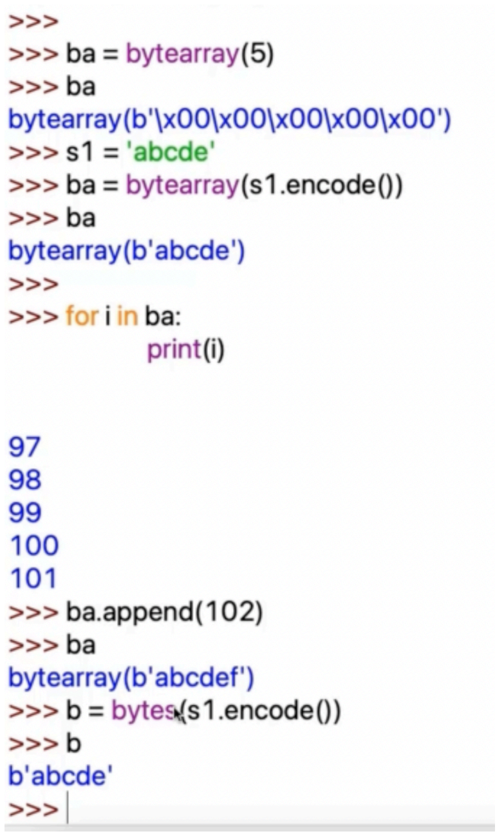
```
abs()            filter()         len()       set()
ascii()          float()          list()      slice()
                 format()         locals()    sorted()
bin()            frozenset()                  str()
bool()                            map()       sum()
bytearray()      globals()        max()       super()
bytes()                           min()

callable()                        next()      tuple()
chr()            hasattr()                    type()
complex()        hash()           object()
                 help()           oct()
dict()           hex()            open()      zip()
dir()                             ord()
divmod()
                 id()             pow()
enumerate()      input()          print()
eval()           int()
exec()           isinstance()     range()
                 issubclass()     reversed()
                 iter()           round()
```

- Lets see the working of these functions
- abs( ) , ascii( )



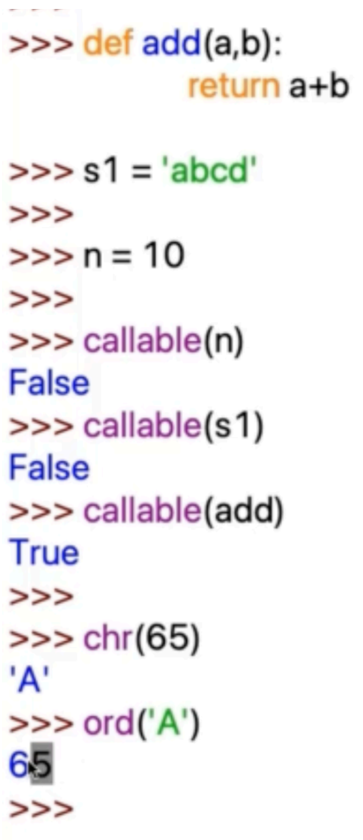
```
>>>
>>> a = -15
>>> abs(a)
15
>>> b = -17.86
>>>
>>> abs(b)
17.86
>>>
>>> abs(3+4j)
5.0
>>> ascii('A')
"'A'"
>>> ascii(10)
'10'
>>> letter = '\u0521'
>>> letter
'ԡ'
>>> ascii(letter)
"'\\u0521'"
>>>
```

- bin( ) it takes number and convert it into binary form
- bool( ) convert anything into bool type
- bytearray( ) and bytes( ) they both are similar the difference is byte array is mutable where as bytes is immutable



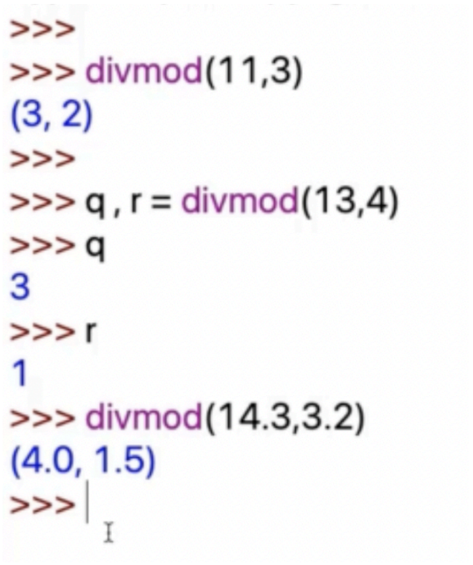
```
>>>
>>> ba = bytearray(5)
>>> ba
bytearray(b'\x00\x00\x00\x00\x00')
>>> s1 = 'abcde'
>>> ba = bytearray(s1.encode())
>>> ba
bytearray(b'abcde')
>>>
>>> for i in ba:
                print(i)


97
98
99
100
101
>>> ba.append(102)
>>> ba
bytearray(b'abcdef')
>>> b = bytes(s1.encode())
>>> b
b'abcde'
>>>
```

- callable( ) we can know if the given identifier is a function or not
- chr( ) gives you the character for any given ascii code
- complex( ) used for creating complex datatype



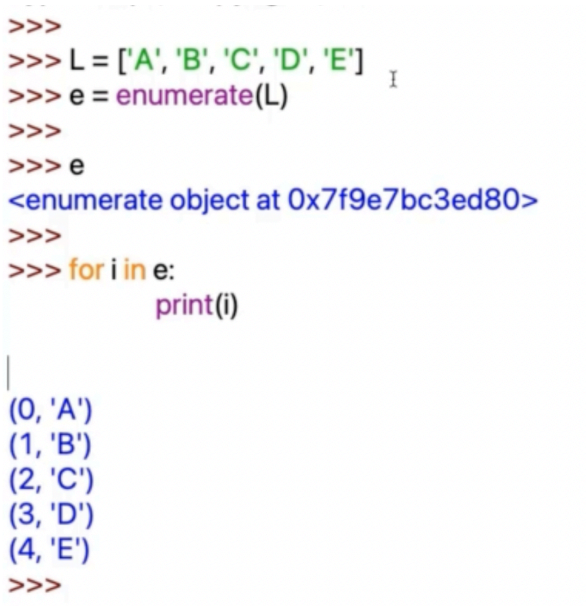
```
>>> def add(a,b):
            return a+b

>>> s1 = 'abcd'
>>>
>>> n = 10
>>>
>>> callable(n)
False
>>> callable(s1)
False
>>> callable(add)
True
>>>
>>> chr(65)
'A'
>>> ord('A')
65
>>>
```

- dict( ) used for creating a Dictionary
- dir( ) give details of particular class
- divmod( ) takes 2 parameters and gives division as well as modulus as result



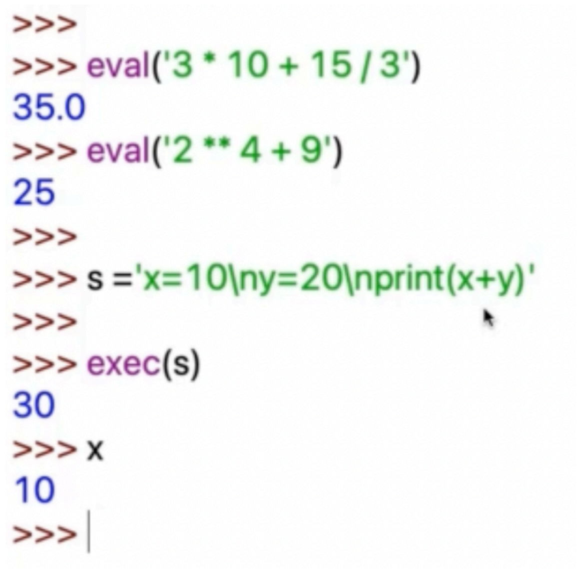
```
>>>
>>> divmod(11,3)
(3, 2)
>>>
>>> q , r = divmod(13,4)
>>> q
3
>>> r
1
>>> divmod(14.3,3.2)
(4.0, 1.5)
>>>
```

- enumerate( ) gives indexing for all items in given sequence



```
>>>
>>> L = ['A', 'B', 'C', 'D', 'E']
>>> e = enumerate(L)
>>>
>>> e
<enumerate object at 0x7f9e7bc3ed80>
>>>
>>> for i in e:
            print(i)


(0, 'A')
(1, 'B')
(2, 'C')
(3, 'D')
(4, 'E')
>>>
```

- eval( ) evaluates an expression
- exec( ) execute python statements



```
>>>
>>> eval('3 * 10 + 15 / 3')
35.0
>>> eval('2 ** 4 + 9')
25
>>>
>>> s ='x=10\ny=20\nprint(x+y)'
>>>
>>> exec(s)
30
>>> x
10
>>>
```