

```
In [1]: help (eval)
```

Help on built-in function eval in module builtins:

```
eval(source, globals=None, locals=None, /)
    Evaluate the given source in the context of globals and locals.
```

The source may be a string representing a Python expression or a code object as returned by compile(). The globals must be a dictionary and locals can be any mapping, defaulting to the current globals and locals. If only globals is given, locals defaults to it.

```
In [5]: def media (*arg):
        return round (sum(arg) / len(arg))

print (media(1,2,3,4,5,6,7,8,9))
```

5

```
In [7]: def junta_items (nombre_archivo, separador, *arg) :
        f = open(nombre_archivo, "a")
        f.write(separador.join(arg) + '\n')
        f.close()

junta_items("./test.txt", "; ", 'Carles', '50', '08034')
```

```
In [11]: def doblar (num) :
        return (num*2)

x = doblar

print (x(4))
```

8

```
In [17]: def doblar (num) :
        return (num*2)

x = doblar

x = lambda num : num*2

y = lambda num : num**2+5

print (x(3))
```

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```
In [18]: print (y(3))
```

14

```
In [20]: # def mayor (a,b) :  
#         return (a>b)  
  
z = lambda a,b : a>b  
  
print (z(3,4))
```

False

```
In [21]: l =[c for c in range (1,10) ]  
print(l)  
l =[chr(c+96) for c in range (1,10) ]  
print(l)  
  
[1, 2, 3, 4, 5, 6, 7, 8, 9]  
['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i']
```

```
In [25]: cadena = "11.1 \n11.2 \n11.3 \n11.4 \n11.5 \n11.9 \n11.10 \n11.11 \n"  
print(cadena)  
d = { str(c):chr(ord(str(c))+48) for c in range (1,10) }  
# d['a0'] = 'j'  
# d['a1'] = 'k'  
for item in d :  
    cadena = cadena.replace('.'+item, '.'+d[item])  
print(cadena)
```

11.1
11.2
11.3
11.4
11.5
11.9
11.10
11.11

11.a
11.b
11.c
11.d
11.e
11.i
11.a0
11.a1

```
In [24]: d = { str(c):chr(ord(str(c))+48) for c in range (1,10) }  
print(d)
```

{'1': 'a', '2': 'b', '3': 'c', '4': 'd', '5': 'e', '6': 'f', '7': 'g', '8': 'h', '9': 'i'}

```
In [2]: def cuenta_atras(num):
#----- ejemplo de recursiva
    num -= 1
    if num > 0:
        print(num)
        cuenta_atras(num)
    else:
        print("B00000000M !!!!!")
        print(">>Fin de la función ", num)
        print ("retorno de", num+1)
#-----proceso principal
#
cuenta_atras(5)
```

```
4
3
2
1
B00000000M !!!!!
>>Fin de la función  0
retorno de 1
retorno de 2
retorno de 3
retorno de 4
retorno de 5
```

```
In [1]: import turtle

miTortuga = turtle.Turtle()
miVentana = turtle.Screen()

def dibujarEspiral(miTortuga, longitudLinea):
    if longitudLinea > 0:
        miTortuga.forward(longitudLinea)
        miTortuga.right(90)
        dibujarEspiral(miTortuga, longitudLinea-5)
#-----Proceso principal

dibujarEspiral(miTortuga,100)
miVentana.exitonclick()
```

```
In [ ]:
```