

```
In [1]: 5==5,0
```

```
Out[1]: (True, 0)
```

```
In [2]: 5,0 == 5
```

```
Out[2]: (5, False)
```

```
In [3]: 5.0 == 5
```

```
Out[3]: True
```

```
In [4]: a = 5
```

```
In [5]: a = 5+1
```

```
In [6]: print (a)
```

```
6
```

```
In [7]: b = a
```

```
In [8]: print (b)
```

```
6
```

```
In [9]: b = a+3
```

```
In [10]: a=3  
b=5  
c=a+b
```

```
In [11]: c
```

```
Out[11]: 8
```

```
In [12]: b=10
```

```
In [13]: c
```

```
Out[13]: 8
```

```
In [14]: c=a+b
```

```
In [15]: c
```

```
Out[15]: 13
```

```
In [16]: a
```

```
Out[16]: 3
```

```
In [17]: a = a + 1
```

```
In [18]: a
```

```
Out[18]: 4
```

```
In [19]: a = a + 10  
a
```

```
Out[19]: 14
```

```
In [20]: a = a * 10
```

```
In [21]: a
```

```
Out[21]: 140
```

```
In [22]: a=5  
a = a + 1  
print (a)
```

```
6
```

```
In [23]: a=5  
a += 1 # a = a + 1  
print (a)
```

```
6
```

```
In [24]: a=5  
a *= 10 # a = a * 10  
print (a)
```

```
50
```

```
In [25]: a=3  
b='mitsos '  
a*b
```

```
Out[25]: 'mitsos mitsos mitsos '
```

```
In [26]: 'mitsos ' * 3
```

```
Out[26]: 'mitsos mitsos mitsos '
```

```
In [27]: a=3  
a > 5
```

```
Out[27]: False
```

```
In [28]: b = a>5
```

```
In [29]: print(b)
```

```
False
```

```
In [30]: def athroisma(a,b):  
         return a+b
```

```
In [32]: athroisma(5,6)
```

```
Out[32]: 11
```

```
In [33]: len("mitsos")
```

```
Out[33]: 6
```

$$f(x) = 2x+5$$

```
In [34]: def f(x):  
         return (2*x) + 5
```

```
In [35]: f(10)
```

```
Out[35]: 25
```

```
In [36]: def f():  
         return 5
```

```
In [37]: f()
```

```
Out[37]: 5
```

```
In [38]: ' asdfasdf asdf '.strip()
```

```
Out[38]: 'asdfasdf asdf'
```

```
In [41]: def f():  
         print ('mitsos')  
  
         def g():  
             return 'mitsos'
```

```
In [56]: b = f()  
mitsos
```

```
In [57]: a=g()  
print(a)  
mitsos
```

```
In [47]: print(b)  
None
```

```
In [48]: a=3
```

```
In [49]: type(a)
```

```
Out[49]: int
```

```
In [51]: a=3.3  
         type(a)
```

```
Out[51]: float
```

```
In [52]: a=True  
         type(a)
```

```
Out[52]: bool
```

```
In [53]: a=None  
         type(a)
```

```
Out[53]: NoneType
```

```
In [55]: '' == None
```

```
Out[55]: False
```

```
In [ ]:
```

```
In [44]: a = g()
```

```
In [45]: print (a)
```

```
mitsos
```

```
In [58]: # Μία συνάρτηση που τυπώνει το διπλάσια ενός αριθμού:  
def f(x):  
    print (2*x)
```

```
In [59]: # Μία συνάρτηση που επιστρέφει το διπλάσια ενός αριθμού:  
def f(x):  
    return 2*x
```

```
In [60]: b = f(4)  
         print(b)
```

```
8
```

```
In [61]: b
```

```
Out[61]: 8
```

```
In [63]: def f(x):  
         return x+1  
  
         def g(x):  
             return f(x)*2  
  
         g(2)
```

```
Out[63]: 6
```

```
In [64]: (2+1)*2
```

```
Out[64]: 6
```

```
In [65]: def f(x):  
         b=x  
         c=x/2  
         return b+c
```

```
In [66]: f(10)
```

```
Out[66]: 15.0
```

```
In [75]: def f(x):  
         def g(y):  
             return y+1  
  
         return g(x/2)  
  
         f(10)
```

```
Out[75]: 6.0
```

```
In [76]: g(5)
```

```
Out[76]: 6
```

```
In [81]: def f(x):  
         def g(y):  
             return y+1  
  
         return g(x/2)
```

```
In [ ]:
```

```
In [82]: f(10)
```

```
Out[82]: 6.0
```

```
In [ ]:
```

```
In [69]: def f(x):  
         return x+1  
  
         a=2  
         f(a/2)
```

```
Out[69]: 2.0
```

```
In [73]: def f(x):
         return x+1

         f(2)
```

Out[73]: 3

```
In [71]: f(10/2)
```

Out[71]: 6.0

```
In [72]: a=10
         f(a/2)
```

Out[72]: 6.0

```
In [74]: f(1)+f(2)
```

Out[74]: 5

```
In [85]: def f(x):
         return (x+1)
```

```
In [89]: def f(x):
         a=x
         b=x/2
         return a+b
```

```
File "<tokenize>", line 3
    b=x/2
    ^
IndentationError: unindent does not match any outer indentation level
```

- ΔΙΑΦΟΡΑ print , return
- βασικα εβαλα 2 πραξεις σε μια συναρτηση και μου εβγαλε μονο το αποτελεσμα της πρωτης

```
In [90]: print("mitsos", 1, True)
```

mitsos 1 True

```
In [91]: print ("mitsos")
         print ("kostas")
```

mitsos  
kostas

```
In [92]: print("mitsos")
```

mitsos

```
In [93]: return("mitsos")
```

```
File "<ipython-input-93-4de9bd7a78c4>", line 1
    return("mitsos")
    ^
SyntaxError: 'return' outside function
```

```
In [94]: def f(x):  
         return x+1  
  
         a=f(3)  
         print (a)
```

4

```
In [95]: def f(x):  
         return x+1  
         print ("mitsos")
```

```
In [97]: a=f(3)
```

```
In [98]: def f(a,b):  
         return a+b
```

```
In [99]: f(4,5)
```

```
Out[99]: 9
```

$$ax^2 + bx + c = 0$$

```
In [100]: def f(a,b):  
          return a+1, b-2  
  
          k,l = f(5,4)
```

```
In [101]: k
```

```
Out[101]: 6
```

```
In [102]: l
```

```
Out[102]: 2
```

```
In [108]: a=2  
  
          if a>3:  
              print ("mitsos")  
              print ("kostas")
```

```
In [109]: a=2  
          print (a>3)
```

False

```
In [107]: a=2  
  
          if a>3:  
              print ("mitsos")  
  
          print ("kostas")
```

kostas

```
In [114... # Έλεγχος αν ένας αριθμός είναι στο διάστημα: 50,150
a=120
if a>=50 and a<=150:
    print ('inside')
```

inside

```
In [116... # Έλεγχος αν ένας αριθμός ΔΕΝ είναι στο διάστημα 50,150
a=30
if not (a>=50 and a<=150):
    print ('outside')
```

outside

```
In [119... a=100
if a < 50 or a > 150:
    print ('outside')
```

```
In [ ]:
```

```
In [120... a=2

if a>3:
    print ("mitsos")
```

```
In [125... a=3

if a>=3:
    print ("mitsos")

if a<=3:
    print ('kwstas')

#else:
#    print ("kwstas")
```

mitsos  
kwstas

```
In [126... a=3

if a>=3:
    print("mitsos")
else:
    print('kostas')
```

mitsos

```
In [129... a=4
if a%2==0:
    print('zugos')
else:
    print('monos')
```

zugos

```
In [131... 11%2
```

```
Out[131... 1
```



In [149...

```
bmi = 20

if bmi<=20:
    print ("lipovaris")
if bmi>=20 and bmi<=30:
    print ('normal')
if bmi>=30:
    print ('overweight')
```

lipovaris  
normal

In [144...

```
bmi = 20

if bmi<=20:
    print ("lipovaris")
elif bmi>=20 and bmi<=30:
    print ('normal')
elif bmi>=30 and bmi<100:
    print ('overweight')
```

In [148...

```
bmi = 20

if bmi<=20:
    print ("lipovaris")
elif bmi>=20 and bmi<=30:
    print ('normal')
else:
    print ('overweight')
```

lipovaris

In [150...

```
def f(n):
    return n%2==0
```

In [151...

```
f(5)
```

Out[151...

False

In [152...

```
f(4)
```

Out[152...

True

In [153...

```
def f(n):
    if n%2==0:
        return True
    else:
        return False
```

In [154...

```
a = b>3
```

In [ ]:

```
if b>3:
    a=True
else:
    a=False
```