

[1, 2]	a list with two elements
(1, 2)	a tuple with two elements
{}	an empty dictionary
list1 = [1, 2] list2 = [3, 4] list3 = [list1[0] + list2[0], list1[1] + list2[1]]	[4, 6]
txt = "a" * 1000	txt is a string with a length of 1000
lst = [1, 2] lst.append(3) lst.append(4) print(lst)	[1, 2, 3, 4]
[[]] * 3	[[], [], []]
X = 10 print(r"x is equal to " + str(X))	x is equal to 10
"ABCD"[::-1]	DCBA
"ABCDEF"[1:]	BCDEF
i = "12345678"[1::2] == "2468"	True
len({1, 1, 2}) == 3	True
dict{}	an empty dic
print(a \n b)	a b
print('a"b')	a"b
print("\\\\\\\\\\\\\\\\")	\\\\\\
print("a\\bc")	c
for i in range(2, 6): print(i)	2 3 4 5
import numpy	imports the numpy library
import numpy as numpy	The name numpy is available in the namespace
from math import sin from numpy import sin as nsin	This does not cause any namespace conflicts

<code>from numpy import (only what we need)</code>	good practice!
<code>import numpy as np</code>	good practice!
<code>from numpy import pi as pi</code>	The name pi is available in the namespace
<code>np.nan != np.nan</code>	True
<code>1 / np.inf</code>	np.nan
<code>(-1) * np.inf</code>	-np.inf
<code>2 / 3</code>	0.6666666666666666
<code>arr = np.zeros((3, 2))</code> <code>arr.size == 6</code>	True
<code>0 / 0</code>	np.float64(nan)
<code>plt.savefig('filename.png')</code>	Matplotlib saves the plot to a file
<code>type(2**3)</code>	int
<code>np.zeros((3, 2))</code>	Creates a NumPy array with three rows and two columns, filled with zeros
<code>arr = np.zeros((3, 2))</code> <code>arr.size == 3</code>	True
<code>arr = np.zeros((3, 2))</code> <code>arr_resaped = arr.reshape((6,))</code> <code>arr_resaped.ndim == 1</code>	True
<code>class Book:</code> <code>pass</code>	Book is just a class but not an object.