```
3 * 4, 3 + 4, 3 - 4, 3 / 4
                                        #==> 12, 7, -1, 0.75
3 ** 4, 3 // 4, 3 % 4
                                        #==> 81, 0, 3
4 > 3, 4 >= 3, 3 == 3.0, 3 != 4, 3 <= 4
                                        #==> True, True, True, True, True
#运算顺序: 括号, **, {* / // %}, {+ -}, {== != <= <> >=}
min(3, 4), max(3, 4), abs(-10)
                                        #==> 3, 4, 10
sum([1, 2, 3]) #[1, 2, 3]是一个列表
                                       #==> 6
type(3), type(3.0), type("myVariable")
                                        #==> class 'int', class 'float',
                                        # class 'str'
                                        #==> 40, 3.0, '0.5'
int("4"+"0"), float(3), str(1 / 2)
"double quotes: ', escaped \" \\ \'"
                                        #==> double quotes: ', escaped " \ '
'it\'s "similar" in single quotes '
                                        #==> it's "similar" in single quotes
                                        #==> 65, 'B'
ord("A"), chr(66)
string = "hello"
#下列语句也适用于列表
len(string)
                                        #==> 5
                      # 得到字符
                                        #==> "h", "o"
string[0], string[4]
                      # 得到一个子字符串 #==> "el"
string[1:3]
                                       #==> "he", "llo"
string[:2], string[2:] # 1/r 子字符串
string[-1], string[-2:] # 负索引
                                       #==> "o", "lo"
"con" + "cat" + "enation " + str(123)
                                       #==> "concatenation 123"
"boo" * 2
                                        #==> "booboo"
getLineOfInputAsString = input()
                                        #==> 读入输入 (或者 EOF 错误)
print("takes", 0, "or more arguments")
                                        #==> takes 0 or more arguments
print("using", "custom", "sep", sep=".") #==> using.custom.sep
print("no", "newline", end="bye")
                                        #==> no newlinebye
not True, False or True, False and True
                                       #==> False, True, False
# 运算顺序: 括号, {==!=}, not, and, or
if booleanCondition:
                        # 缩进主体
  Х
                        # 主体中的每一行缩进程度一致
  x
elif anotherCondition:
                        # elif不必须出现,使用次数无限制
                        # 缩进
                        # 可自行选择
else:
                        # 缩进
  x
while booleanCondition:
                        # 主体
  x
                        # 跳出循环 (可选)
  break
  continue
                        # 从下一次迭代重新开始(可选)
for indexVariable in range(low, highPlus):
  print(indexVariable)
                                        #==> low, low+1, ..., highPlus-1
# "for item in listOrString:" forall/foreach 循环
# break, continue可以用在for循环
```

```
def nameOfNewFunction(argument1, argument2):
                       # 主体
                       # (可选;如果你不返还,函数默认返还None)
   return y
def remember(bar):
                       # 写入全局变量
   global saveBar
                     # 在调用foo(3)后, saveBar = 3
   saveBar = bar
                       # 即使超出函数的范围
# 这些"切割"指令在列表和range()中十分相似
"0123456789"[::2] # 切割
                                      #==> "02468"
                       # 颠倒
                                      #==> "9876543210"
"0123456789"[::-1]
                                      #==> "654"
"0123456789" [6:3:-1]
            # 也可以是 -=, /=, *=, %=, **=, //=. Python没有C++-的设定"x++" # 多#
x += 1
x, y = y, x # 多个指定
            # 与"(3 < x) and (x < 5)"一致。可以连接{<<=>>===!= is}
3 < x < 5
                       # 输入一个模块,使用 "." (英文句号) 来使用math下的函数
import math
print(math.sqrt(2))
                       # 输入一个模块,无需"."使用方程
from math import sqrt
print(sqrt(2))
# math模块还有以下函数: pi, exp, log, sin, cos, tan, ceil, floor等等
list = ['zero', 'one', 'two']
list.index('one')
                                      #==> 1
list.index('three')
                                      #==> 导致错误
'three' in list, 'zero' in list
                                      #==> False, True
list.count('two')
                                      #==> 1
del list[1]
            # 列表变成 ['zero', 'two']
"string" in "superstring"
                                      #==> True
                                      #==> 5
"superstring".index("string")
# 其他列表运算函数: append(item), insert(item, index), extend(list),
# remove(value), pop(), pop(index), reverse(), sort()等等
# 一些字符串函数: capitalize(), lower/upper(), islower/isupper(),
# isalpha/isdigit(), center/ljust/rjust(width, fillChar), strip(), split(),
# splitlines(), endswith/startswith(string), find(string), replace(old, new),
# 等等
myList = [11, 99]
actuallyTheSameList = myList # 不是彻底地复制!只是复制了引用
myList is actuallyTheSameList
                                           #==> True
                          # 或者list(myList), copy.copy(myList), deepcopy
realCopy = myList[:]
realCopy is myList
                                      #==> False
```