### 基本操作

# for/else  
i = 0  
for i in range(1,10):  
 i += 1  
else:  
 print("done")  
  
# while/else  
while i < 20:  
 i += 1  
else:  
 print("done")  
  
print(i)  
  
# 生成器函数  
def gen(n):  
 for i in n:  
 yield i \* 2  
  
  
print(gen((1, 2, 3, 4, 5)).\_\_next\_\_())  
  
# 全局命名空间  
x = 'old'  
  
  
def foo():  
 global x, y  
 x = 'new'  
  
  
foo()  
print(x) # new  
  
# 局部命名空间  
x = 'global'  
  
  
def outer():  
 x = 'old'  
  
 def foo():  
 nonlocal x  
 x = 'new'  
  
 foo()  
 print(x) # new  
  
  
outer()  
print(x) # global  
  
# 触发异常  
raise KeyError  
  
# 捕捉异常  
try:  
 outer()  
except:  
 print("error")  
finally:  
 pass  
  
  
# 调试检查  
assert x > 0, 'X is too big'  
  
  
# 跨行编写代码  
A, B, C = input("please enter a number")  
if (A == 1 and  
 B == 2 and  
 C == 3): print("xxx")  
  
C = A + B \  
 + C  
  
# 输入案例  
while True:  
 reply = input("Enter text:")  
 if reply == 'stop':  
 break  
 elif not reply.isdigit():  
 print("bad!" \* 8)  
 else:  
 print(int(reply) \*\* 2)  
print("Bye!")

#### 打印格式

# 解包赋值 （\*）  
a, \*b = 'spam'  
print(b) # ['p', 'a', 'm']  
a, \*b, c = 'spam'  
print(a, b, c) # s ['p', 'a'] m  
  
# 多目标赋值  
spam = ham = 'launch'  
  
# 序列赋值  
string = 'spam'  
a, b, c, d = string  
print(a, b, c, d)  
  
# 列表赋值  
[a, b] = ['a', 'b']  
print(a, b)  
  
# 其它形式  
[a, b] = ('a', 'b')  
print(a, b)  
  
# 利用切片赋值  
string = 'abcdef'  
a, b, c, d = string[0], string[1], string[2], string[3:]  
print(a, b, c, d)  
  
(a, b), c = string[:2], string[2:]  
print(a, b, c)  
  
# 元组赋值  
((a, b), c) = ('SP', 'AM')  
print(a, b, c)  
  
# extend 用法  
L = [1, 2, 3, 4, 5, 6]  
L.extend([7, 8])  
print(L)  
  
# 打印格式  
import sys  
  
print(L, end='\t', sep='\*', file=sys.stdout)