def countdown(n):  
 if n <= 0:  
 print('Blastoff!')  
 else:  
 print(n)  
 countdown(n - 1)  
  
time=int(input())  
countdown(time)

>>>3

3

2

1

Blastoff!

>>>0

Blastoff!

>>>-1

Blastoff!

In our condition n<=0 which is mean when n smaller than zero or equal as zero then print(“blastoff”), obviously n<=0 include zero.

Run time error example:

def run\_time\_error(n):  
 if n != 0 :  
 run\_time\_error(n-1)  
  
  
k=int(input())  
run\_time\_error(k)

>>>-1

RecursionError: maximum recursion depth exceeded in comparison

This example is to get a input number from user call a subtract function until the number equal 0 then shut the program.

There are three case\

1. When input number greater than zero

The number meet condition n!=0, then countdown until the number equal as zero, program exit.

1. When input number equal as zero

The number meet the condition n=0 as the first time call function, program exit instantly.

1. When input number smaller than zero

The number meet condition n!=0, keeping countdown, but obviously the number can’t meet condition n=0 no matter how many times call subtract function, then lead to **RecursionError.**

To fix the error, we need to write a IF statement incase user input negative number

def run\_time\_error(n):  
 if n != 0 :  
 run\_time\_error(n-1)  
  
k=int(input())  
**if k < 0:  
 exit()**  
run\_time\_error(k)