**4、选择排序法-一元降序**

nums = [3,5,1,7,9,6,8]

lenth = len(nums)

count\_iter = 0

count\_swap = 0

for i in range(lenth):

minindex = i

for j in range(i+1,lenth):

count\_iter += 1

if nums[j] < nums[minindex]:

minindex = j

if minindex != i:

nums[minindex],nums[i] = nums[i],nums[minindex]

count\_swap += 1

print(nums,count\_iter,count\_swap)

**选择排序法-二元降序**

nums = [3,5,1,7,9,6,8]

lenth = len(nums)

count\_iter = 0

count\_swap = 0

for i in range(lenth//2):

minindex = i

maxindex = -i-1

for j in range(i+1,lenth-i):

count\_iter += 1

if nums[j] < nums[minindex]:

minindex = j

if nums[-j-1] > nums[maxindex]:

maxindex = -j-1

if minindex != i:

nums[minindex],nums[i] = nums[i],nums[minindex]

if maxindex == i:

maxindex = minindex - lenth

count\_swap += 1

if maxindex != -i-1:

nums[maxindex],nums[-i-1] = nums[-i-1],nums[maxindex]

count\_swap += 1

print(nums,count\_iter,count\_swap)

5、logs1 = logs.upper().split()

lenth = len(logs1)

set1 = {}

for i in range(1,lenth,5):

string = str(logs1[i]).strip("\"")

set1[string] = set1.get(string,0) + 1

print(set1)