#算法8-1 初始化结点方法

#######################

class ListItem(object):

def \_\_init\_\_(self ,key,value):

self.key = key

self.value = value

class SortSequenceList(object):

def \_\_init\_\_(self):

self.SeqList=[]

def CreateSequenceListByInput(self,nElement):

self.SeqList.append(ListItem(int(0), 0))

print("请输入数据：")

for i in range(1,nElement+1):

a = input()

self.SeqList.append(ListItem(int(a), i))

def TraverseElementSet(self):

for i in range(1,len(self.SeqList)):

print(self.SeqList[i].key)

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#算法8-2 直接插入排序

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def InsertSort(self):

SeqListLen = len(self.SeqList)

for i in range(2,SeqListLen):

self.SeqList[0].key = self.SeqList[i].key

index = i

while self.SeqList[index - 1].key >self.SeqList[0].key:

self.SeqList[index].key = self.SeqList[index - 1].key

index = index-1

self.SeqList[index].key = self.SeqList[0].key

if \_\_name\_\_ =='\_\_main\_\_':

SL=SortSequenceList()

SL.CreateSequenceListByInput(5)

SL.InsertSort()

print('插入排序算法结果为:')

SL.TraverseElementSet()