实验目的：二分查找搜索算法python程序

def binary\_search(alist, data):

# if len(alist):#查找的终止递归条件

# mid = (len(alist)) // 2

# if alist[mid] == data:

# return True

# elif data < alist[mid]:

# return binary\_search(alist[:, mid], data)

# else:

# return binary\_search(alist[mid + 1:], data)

# else:

# return False

# 为何我编写的上标越界，由于使用了None，区别于node=None

mid = (len(alist)) // 2

# if len(alist) ==0:#终止的失败条件，正确

# if alist == []:#正确

# if alist is No=ne:这种是错误表达

if len(alist) == 0: # 终止的失败条件，正确

return False

elif data == alist[mid]: # 成功条件

return True

elif data < alist[mid]: # 递归条件

return binary\_search(alist[:, mid], data)

else:

return binary\_search(alist[mid + 1:], data)

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

a = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

result1 = binary\_search(a, 8)

print(result1)

result2 = binary\_search(a, 100)

print(result2)