Que1:

def nrc(s):

hash\_table={}

for char in s:

if char not in hash\_table:

hash\_table[char]=1

else:

hash\_table[char]+=1

for i in range(len(s)):

if hash\_table[s[i]]==1:

return i

return None

string="heello"

print(nrc(string))

Que 2:

def three\_sum(arr):

arr.sort()

result=[]

for i in range(len(array)):

if nums[i]==0 or nums[i]!=nums[i-1]:

left=i+1

right=len(arr)-1

while(left<right):

three\_sum=arr[i]+arr[left]+arr[right]

if three\_sum==0:

result.append(arr[i] , arr[left] , arr[right])

left+=1

while left<right and arr[left]==arr[left-1]):

left+=1

elif threesum < 0:

left+=1

else:

right-=1

return result

Que3:

def two\_sum\_2(arr , target):

left=0

right=len(arr)-1

for i in range(len(arr)):

current\_sum=arr[left]+arr[right]

if current\_sum==target:

return [left+1 , right+1]

elif current\_sum<target:

left+=1

else:

right-=1

return None

Que 4:

def isomor\_string(s,t):

if(len(s)!=len(t)):

return False

s\_hash={}

t\_hash={}

for i in range(len(s)):

char\_s=s[i]

char\_t=t[i]

if char\_s not in s\_hash:

s\_hash[char\_s]=char\_t

if char\_t not in t\_hash:

t\_hash[char\_t]=char\_s

if(s\_hash[char\_s]!=char\_t or t\_hash[char\_t]!=char\_s):

return False

return True

s="hello"

t="sello"

print(isomor\_string(s,t))

Q5:

def max\_profit(arr):

left=0

profit=0

for right in range(1,len(arr)):

if arr[right] < arr[left]:

left=right

else:

profit=max(max\_profit, arr[right]- arr[left])

return profit

arr=[2,3,5,6,7]

max\_profit(arr)