def binarysearch(arr,l,r,x):

while(l<r):

mid=(l+r)//2

# mid=k/2

# print(mid)

if arr[mid]==x:

return mid

elif x>arr[mid]:

l=mid+1

else:

r=mid-1

arr=[2,3,4,10,40]

x=10

result=binarysearch(arr,0,len(arr)-1,x)

if result!=-1:

print("element is present at %d" %result)

else:

print("Element is not present in the array")