def func(a,mid,n):

    k=0

    d=0

    for i in range(n):

        if k+a[i]<=mid:

            k+=a[i]

        else:

            d+=1

            k=a[i]

    return d

def largestSubarraySumMinimized(a: [int], k: int) -> int:

    n=len(a)

    s=max(a)#5

    e=sum(a)#15

    while(s<=e):

        mid=(s+e)//2

        b=func(a,mid,n)

        if b>=k:

            s=mid+1

        else:

            e=mid-1

    return s