'''

#BRUTE FORCE METHOD

l = list(map(int, input().split()))

n = len(l)

count = 0

for i in range(n-1):

    for j in range(0, n-i-1):

        if l[j]>l[j+1]:

            count += 1

            l[j], l[j+1] = l[j+1], l[j]

print(count)

'''

# nlogn method

def merge(l, left, mid, right):

    count, k = 0, 0

    temp = []

    i, j = left, mid+1

    while(i<=mid and j<=right):

        if(l[i]<=l[j]):

            temp.append(l[i])

            i += 1

        else:

            temp.append(l[j])

            j += 1

            count += mid-i+1

    while(i<=mid):

        temp.append(l[i])

        i += 1

    while(j<=right):

        temp.append(l[j])

        j += 1

    for i in range(left, right+1):

        arr[i] = temp[i-left]

    return count

def mergeSort(arr, left, right):

    mid = (left+right)//2

    count = 0

    if left<right:

        count += mergeSort(arr, left, mid)

        count += mergeSort(arr, mid+1, right)

        count += merge(arr, left, mid, right)

    return count

arr = [8,4,2,1]

print(mergeSort(arr ,0, len(arr)-1))