def findMedianSortedArrays(self, A, B):

p=len(A)

q=len(B)

if p<q:

return self.findMedianSortedArrays(B,A)

l=0

r=q\*2

while l<=r:

mid2=(l+r)>>1

mid1=p+q-mid2

L1=-sys.maxsize-1 if mid1==0 else A[(mid1-1)>>1]

L2=-sys.maxsize-1 if mid2==0 else B[(mid2-1)>>1]

R1=sys.maxsize if mid1==2\*p else A[mid1>>1]

R2=sys.maxsize if mid2==2\*q else B[mid2>>1]

if L1>R2:

l=mid2+1

if L2>R1:

r=mid2-1

else:

return (max(L1,L2)+min(R1,R2))//2.0