BINARYSEARCH(a, low, high, first, last)

IF(first>last) RETURN FALSE

ELSE

mid🡨(first+last) DIV2;

IF(a[mid]>=low and a[mid]<=high)

RETURN TRUE

ELSE IF(mid<low)

BINARYSEARCH(a,low,high,mid+1,last)

ELSE IF(mid>high)

BINARYSEARCH(a,low,high,first,mid-1)