\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*Function: fnLnSearchMaxnMin   
\*Description: Function to perform Linear Search and also find the maximum and minimum elements in an array using Divide and Conquer  
\*Input parameters:   
 \* int A[] - array of elements in ascending order   
 \* int k - key element to be searched   
 \* int iN - no of elements to be searched  
 \* int \*max - pointer to hold the max element   
 \* int \*min - pointer to hold the min element

\*RETURNS: position of the element if found or -1 otherwise \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int fnLinSearch(int A[], int k, int iN, int \*max, int \*min)

{

if( iN ==0) return -1;

else if( k == A[iN-1])

return iN;

else return fnLinSearch(A,k,iN-1);

min\* = int A[0];

max\* = int A[-1];

}

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OUTPUT SAMPLE

Enter the size of the array:

8

Enter the elements of the array in ascending order:

1 7 9 10 11 19 23 50

Enter the key element

19

Element found at position

6 (index 5)

Max Element = 50 (index 7 or -1)

Min Element = 2 (index 0)