Binary Search Recursive

#include<stdio.h>

int binarysearch(int a[], int low, int high, int x)

{

int mid = (low + high) / 2;

if (low > high) return -1;

if (a[mid] == x) return mid;

if (a[mid] < x)

return binarysearch(a, mid + 1, high, x);

else

return binarysearch(a, low, mid-1, x);

}

int main(void)

{

int a[100];

int len, pos, search\_item;

printf("Enter the length of the array\n");

scanf("%d", &len);

printf("Enter the array elements\n");

for (int i=0; i<len; i++)

scanf("%d", &a[i]);

printf("Enter the element to search\n");

scanf("%d", &search\_item);

pos = binarysearch(a,0,len-1,search\_item);

if (pos < 0 )

printf("Cannot find the element %d in the array.\n", search\_item);

else

printf("The position of %d in the array is %d.\n", search\_item, pos+1);

return 0;

}