//BINARY SEARCH

#include<stdio.h>

int binary(int a[],int low,int high,int key)

{

int middle;

if(low>high)

return -1;

else

middle=(low+high)/2;

if(a[middle]==key)

return middle;

else if(a[middle]>key)

return binary(a,low,middle,key);;

if(a[middle]<key)

return (a,middle+1,high,key);

else

return -1;

}

void main()

{

int n,i;

printf("Enter the size of the array ");

scanf("%d",&n);

int a[n];

printf("Enter the elements\n");

for(i=0;i<n;i++)

{

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

}

printf("Enter the element to find ");

int x,result;

scanf("%d",&x);

result=binary(a,0,n-1,x);

if(result!=-1)

printf("The index value of the element is %d\n",result);

else

printf("Element not found");

}