#include<iostream>

using namespace std;

int main()

{

int A[300];

int n,key,mid,flag=0,lb=0,comp=0;

cout<<"Enter number of elements\n";

cin>>n;

int ub=n-1;

cout<<"Enter the elements\n";

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

cin>>A[i];

cout<<"Enter key\n";

cin>>key;

while(ub>=lb)

{

mid = lb+(ub-lb)/2;

comp++;

if(A[mid]==key)

{

cout<<"key found\n";

flag=1;

break;

}

else if(key > A[mid])

lb=mid+1;

else

ub=mid-1;

}

cout<<"number of comparisons \n"<<comp;

if(flag==0)

cout<<"key not present\n";

}

