//binary search

#include <iostream>

using namespace std;

int binary\_search(int a[], int n, int key){

int s=0;

int e=n-1;

while(s<=e){

int mid=(s+e)/2;

if(a[mid]==key){

return mid;

}else if(a[mid]<key){

s=mid+1;

}else{

e=mid-1;

}

}

return -1;

}

int main(){

int a[100];

int n;

cout<<"enter n =";

cin>>n;

cout<<"enter array =";

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

cin>>a[i];

}

int key;

cout<<"enter key =";

cin>>key;

cout<<"key index="<<binary\_search(a, n, key);

return 0;

}