#include<iostream>

#include<math.h>

using namespace std;

int main()

{

int n,m,flag=0;

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

cin>>n;

m=sqrt(n);

int A[300];

cout<<"Enter elements\n";

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

cin>>A[i];

int key,count=0;

cout<<"Enter key to be found\n";

cin>>key;

int k=m;

if(key>A[0])

{

count++;

while(key>A[k])

{

count++;

k+=m;

}

if(key==A[k])

{

count++;

cout<<"key found\n";

flag=1;

cout<<"comparisons are : "<<count;

}

else

{

for(int i=k-m;i<k+m;i++)

{

if(key==A[i])

{

cout<<"Key found\n";

flag=1;

cout<<"comparisons are : "<<count;

break;

}

}

}

}

else if(key==A[0])

{

cout<<"Key found\n";

cout<<"Comparisons are : 1";

flag=1;

}

if(flag==0)

cout<<"key is not present\n";

cout<<"comparisons are : "<<count;

}

