#include<iostream>

using namespace std;

int main() {

int n;

cin>>n;

int a[1000002];

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

{

cin>>a[i];

}

int start=0,end=n,mid=0;

int target,ans;

cin>>target;

while(start<=end)

{

mid=(start+end)/2;

if(a[mid]<target)

{

start=mid+1;

ans=mid;

}

else if(a[mid]>target)

{

end=mid-1;

ans=mid;

}

else if(a[mid]==target)

{

ans=mid;

cout<<ans;

break;

}

}

if(start>end)

{cout<<"-1";}

    return 0;

}