**//To Search an element using binary search.**

#include<stdio.h>

#include<conio.h>

int Binarysearch(int[],int,int);

void main()

{

int x[20],i,n,p,key;

clrscr();

printf("\n Enter the no of element:");

scanf("%d",&n);

printf("\n Enter %d elements in assending order:",n);

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

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

printf("\n Enter the element to be search:");

scanf("%d",&key);

p=Binarysearch(x,n,key);

if(p== -1)

printf("\n The search is unsuccessful:\n");

else

printf("\n%d is found at location %d",key,p);

getch();

}

int Binarysearch(int a[],int n ,int k)

{

int lo,hi,mid;

lo=0;

hi=n-1;

while(lo<=hi)

{

mid=(lo+hi)/2;

if(k==a[mid])

return(mid);

if(k<a[mid])

hi=mid-1;

else

lo=mid+1;

}

}