void main(){

int mid, high,low,n,ele,loc=-1;

int array[20];

printf("enter the number of elements");

scanf("%d",&n);

int i;

printf("enter the elements");

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

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

}

int j,temp;

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

for (j = i + 1; j < n; j++){

if (array[i] > array[j]){

temp = array[i];

array[i] = array[j];

array[j] = temp;

}

}

}

printf("array after sorting ");

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

printf("%d ",array[i]);

}

printf("\nenter the element to be searched");

scanf("%d",&ele);

low=0;

high=n-1;

while(low<=high){

mid=(low+high)/2;

if(array[mid]==ele){

loc=mid;

break;

}

else if(ele<array[mid])

high=mid-1;

else

low=mid+1;

}

if(loc>=0)

printf("element found in location %d",loc+1);

else

printf("element not found");

}