#include<stdio.h>

int binarysearch(int arr[],int si,int ei,int x){

while(si<=ei){

int mid = si+(ei-si)/2;

if(arr[mid]==x){

return mid;

}

else if(arr[mid]<x){

si=mid+1;

}

else{

ei=mid-1;

}

}

return -1;

}

int main(){

int arr[]={1,2,3,4,5};

int n=5;

int x =3;

int si=0;

int ei = n-1;

printf("elements of the array :");

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

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

}

int result = binarysearch(arr,si,ei,x);

if(result==-1){

printf("\n\nelement not found\n");

}

else{

printf("\nelement found at pisiton %d and index %d",result+1,result);

}

}