|  |
| --- |
| #include<iostream> |
|  |  | #define MAX\_SIZE 100 |
|  |  |  |
|  |  | using namespace std; |
|  |  |  |
|  |  | int main() |
|  |  | { |
|  |  | int arr[MAX\_SIZE],temp[MAX\_SIZE]; |
|  |  | int i,size,num,low=0,high=0,mid=0,count=0; |
|  |  |  |
|  |  | cout<<"Enter the size of Array..."<<endl; |
|  |  | cin>>size; |
|  |  |  |
|  |  | cout<<"Enter the Elements of Array in sorted order-- "<<endl; |
|  |  | for(i=0;i<size;i++) |
|  |  | { |
|  |  | cin>>arr[i]; |
|  |  | } |
|  |  |  |
|  |  | cout<<"Enter the Element to search.. "; |
|  |  | cin>>num; |
|  |  |  |
|  |  |  |
|  |  | low=0; |
|  |  | high=size; |
|  |  | mid=(low+high)/2; |
|  |  | for(i=low;i<high;i++) |
|  |  | { |
|  |  | if(arr[mid]<num) |
|  |  | { |
|  |  | low=mid; |
|  |  | mid=(low+high)/2; |
|  |  | } |
|  |  | else if(arr[mid]>num) |
|  |  | { |
|  |  | high=mid; |
|  |  | mid=(low+high)/2; |
|  |  | } |
|  |  | else if(arr[mid]==num) |
|  |  | { |
|  |  | count=+1; |
|  |  | cout<<"Element found at "<<mid+1; |
|  |  | break; |
|  |  | } |
|  |  | } |
|  |  | if(count==0) |
|  |  | { |
|  |  | cout<<"Element not found..."; |
|  |  | } |
|  |  | return 0; |