

```

#include<iostream>
using namespace std;

int main()
{
    int a[10],i,n,number,low=0,high,mid,flag=0;
    cout<<"Enter the size of array:";
    cin>>n;
    cout<<"\n Enter the elements of array:";
    for(i=0;i<n;i++)
    {
        cin>>a[i];
    }
    cout<<"\n Enter array elements:";
    for(i=0;i<n;i++)
    {
        cout<<"\t"<<a[i];
    }
    cout<<"\n Enter the number to be search:";
    cin>>number;
    high=n-1;
    while(low<high)
    {
        mid=(low+high)/2;
        if(number==a[mid])
        {
            flag=1;
            break;
        }
        if(number<a[mid])
        {
            low=mid+1;
        }
        else
        {
            high=mid-1;
        }
    }
    if(flag=1){
        cout<<"Number is found";
    }else{
        cout<<"Number is not found";
    }
}

```

OUTPUT:

Enter the size of array:3

Enter the elements of array:

10

20

30

Enter array elements:10 20 30

Enter the number to be search:30

Number is found